



Laser Printer, Scanner

User's Guide

Msys 5200





Thank you for purchasing Samsung Msys 5200—the multifunction office product for your home office and the whole family. We are sure that Samsung Msys 5200 will provide all you need in one machine.

Samsung Msys 5200 combines these office machines:

- Plain paper fax*
- Copier*
- Laser printer*
- Scanner*

This booklet contains instructions for Laser Printer and Scanner. Refer to the User's Guide for Laser Facsimile and Copier to use your machine as a plain paper fax and copier.

Enjoy your new Samsung Msys 5200!

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Installing SmarThru Software



About SmarThru Software

You must install the SmarThru CD-ROM to print, scan, or send or receive electronic faxes. The SmarThru includes the followings:

- MFP Driver
- SmarThru Software
- OCR Software (AnyPage)
- Bonus software (Acrobat Reader 3.xx)

For details on the drivers, refer to each item's description.

MFP Driver

To use the machine as your printer, or scanner, or to send or receive electronic faxes, you must install the MFP driver.

SmarThru Software

The SmarThru software contains:

ScanThru

It lets you scan documents and images quickly and easily. With the ScanThru, you can set image type and resolution for the scanner, adjust brightness and contrast, perform a color correction, and so on.

CopyThru

It lets you make a copy of the scanned documents or images. With CopyThru, you can change resolution and image type used for copying, and so on.

FaxThru

It helps you to create fax cover and send electronic faxes.

DocuThru

General form to work with messages. With DocuThru, you can perform all the operation of the SmarThru system.

ImageThru

It is an image database manager and image editor program. With the ImageThru, you can search the database for images, adjust parameters of an image, such as brightness, contrast and saturation, and apply different effects, such as sharpening, emboss, posterize, mosaic etc. You can also send images by fax or mail

MailThru

With MailThru you can send, receive and easily organize your work with e-mail messages. The system provides you with convenient tools which let you sort and find messages using a number of criteria; operate on messages using scenatios.

OCR Software (AnyPage)

OCR (Optical Character Recognition) is a software that has the ability to recognize most character formats. So that a scanned document can be read and edited on your word processor.

Bonus Software

Acrobat Reader 3.x is installed. With Acrobat Reader 3.x, you can view and print the SmarThru User's Guide contained in the SmarThru CD-ROM.

System Requirements

Before you start, make sure you have the following minimum computer setup:

- Windows 3.x, or Windows 9x: 486SX 33MHz or higher processor with 8 MB or higher RAM
- Windows NT 4.0 (Service Pack 3): Pentium 90 or higher CPU with 32 MB or higher RAM
- Free disk space of at least 50MB for full installation
- CD-ROM drive

Installation Procedure

- ✓ *Make sure the machine is plugged in and connected to your computer. Turn your computer and the machine on.*
- ✓ *If Windows 95/98 users see the “New Hardware Found” screen, close it by clicking **Cancel**.*

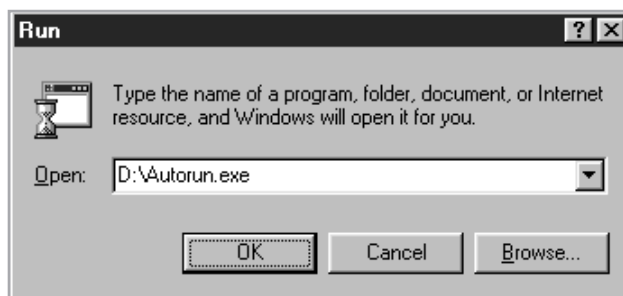
Install the Samsung Software

1. Insert the supplied CD-ROM into your CD-ROM drive.

The SmarThru program is automatically running and the Samsung SmarThru Installation screen will appear.

If the Samsung SmarThru Installation screen does not appear:

- 1) Windows 95/98 users should select **Run** from the **Start** menu.
Windows 3.x users should select **Run** from the **File** menu.
- 2) Type **D:\Autorun** (where ‘D’ represents the letter designation of your computer’s CD ROM drive), and click **OK** to start the installation program.

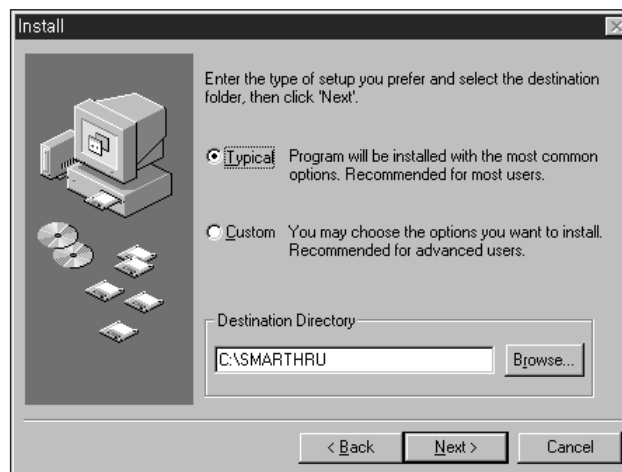


2. The SmarThru program will begin. Click **Install the Samsung Software on your PC.**

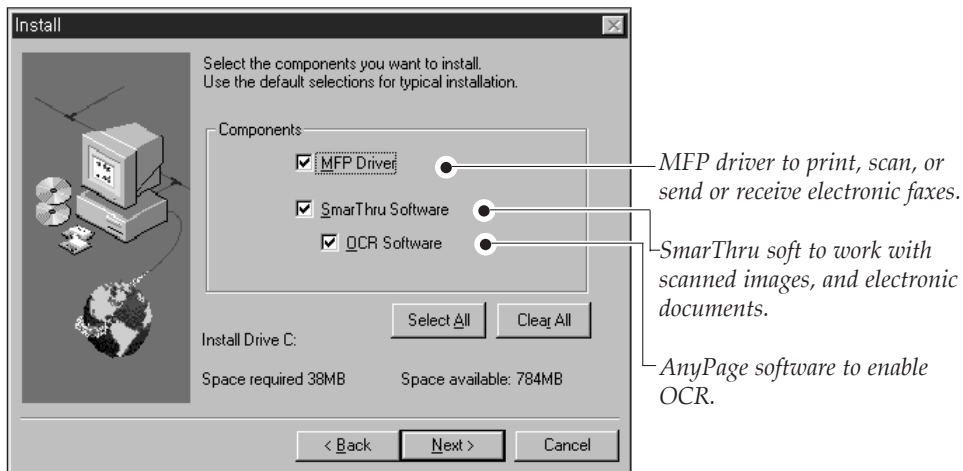


3. Follow the on-screen instructions and click **Next.**

The SmarThru installation supports two types of setup. Typical setup will be installed with the most common options. Recommended for most user. In Custom setup, you can select components to be installed.



If you select Custom installation, you may choose the options you want to install.



4. When the installation is completed, you must shut down and restart your computer.

If your computer does not shut down and restart automatically, you must shut it down manually and restart it before the changes you have made will be in ineffect.

5. After Windows restarts, the Select Service dialog box will appear. You can select the system service you want to use.



6. Click Next and follow the on-screen instructions.

Install Bonus Software (Acrobat Reader 3.xx)

1. Insert the SmarThru CD-ROM into your CD-ROM drive.

The SmarThru installation program will begin. If the program does not start, select **Run** from the **Start** menu for Windows 95/98. For Windows 3.1x, select **Run** from the **File** menu, then type **D (or E) : \Autorun**, and click **OK** to start the program.

2. When the Samsung SmarThru Installation screen appears, click **Install bonus software on your PC**, and follow the on-screen instructions.

Uninstalling SmarThru Software

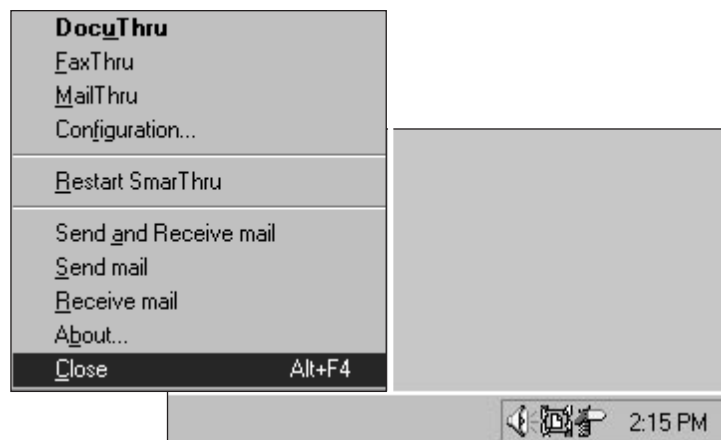
Uninstallation is only required if you are upgrading the software, or if your installation fails.

In Windows 9x, NT

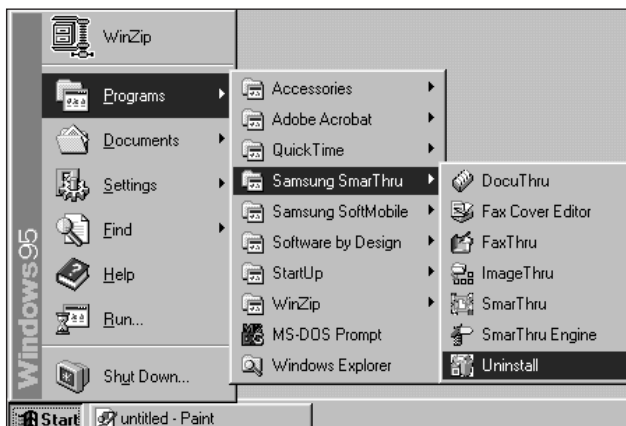
1. Start Windows if not already started.

2. If you find the SmarThru icon and/or the SmarThru engine icon on the right corner of the taskbar at the bottom of your screen, the SmarThru application and the SmarThru engine are working. Close the application and the engine as follows:

Right-click the icon. When the pop-up menu opens, select **Close.**



3. From the **Start** menu, select **Programs**.
4. Select **Samsung SmarThru**, then **Uninstall**. The uninstall dialog box appears. Follow the instructions on the screen to complete uninstallation.



In Windows 3.x

1. Start Windows if not already started.
2. If you find the SmarThru icon and/or the SmarThru engine icon at the bottom of your screen, the SmarThru application and the SmarThru engine are working. Close the application and the engine as follows: **Click the icon. When the pop-up menu opens, select Close**
3. From the **Program Manager**, double click the **Samsung SmarThru**.
4. **In the SmarThru windows, double click the Uninstall icon.** The Uninstall dialog box appears. Follow the on-screen instructions to complete uninstallation.

Using the SmarThru CD-ROM

You can uninstall the MFP driver and the SmarThru software with the CD-ROM you have used to install the software.

1. Insert the SmarThru CD-ROM into your CD-ROM drive.

The SmarThru installation program will begin. If the program does not start, select **Run** from the **Start** menu (for Windows 95/98. For Windows 3.1x, select **Run** from the **File** menu), then type **D** (or **E**) : \Autorun, and click **OK** to start the program.

2. When the Samsung SmarThru Installation screen appears, click **Uninstall the Samsung software your PC**, and follow the on-screen instructions.

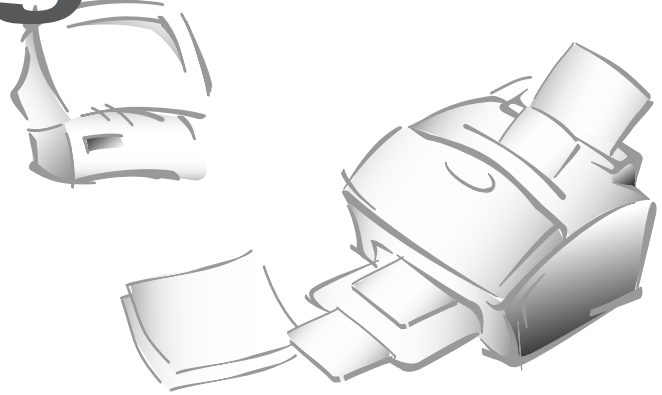
3. Click on the checkboxes to select the components you wish to uninstall. Click on **Next**.



The selected components are uninstalled. You must shut down and restart your computer to complete the uninstallation process. If your computer does not shut down and restart automatically, you must shut it down manually and restart it before the changes you have made will be in effect.



Printing



Printing a Document

This procedure describes the general steps required for printing from various Windows applications. The exact steps for printing a document may vary depending on the application program you are using. Refer to your software application's documentation for the exact printing procedure.

1. Make sure that your machine is properly connected to the computer, and the On/Off Line lamp light is steadily on (if it is not, press the On/Off Line button).

Make sure that you have installed the MFP driver contained on the supplied setup CD-ROM. See 'Installing SmarThru Software' on page 1.1.

2. **Create or open the document you want to print.**
3. **Choose Print or Print Setup from the File menu.** Make sure that your printer is selected as the default printer.
4. **Click on the Properties or Setup button if you want to make any adjustments that are appropriate for printing your document.** (See 'Printer Settings' on page 2.2.)
5. **Select OK to close the Properties dialog box.**
6. **After making any necessary changes to the printing parameters, select OK to start the printing job.**

Printer Settings

You can use your machine with all your Windows 3.x or Windows 9x, or Windows NT applications. Be sure to set your printer as the default printer for all your Windows operations.

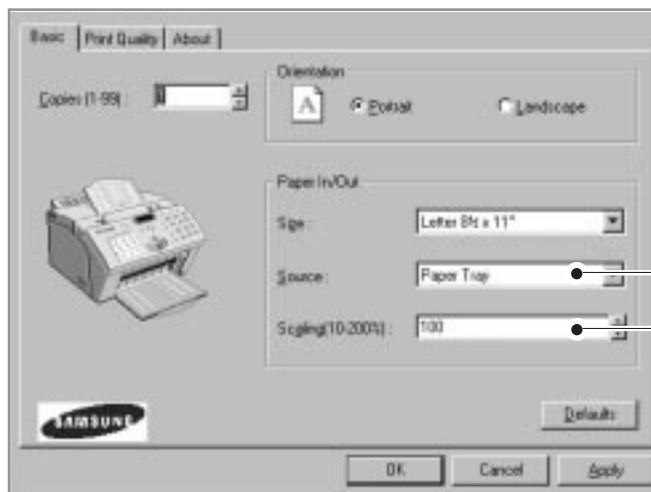
Most Windows software applications allow you to make changes to the printer settings. This changes the number of copies, sequence of the pages, and paper orientation.

If you click Properties, Setup, or Options in the Print dialog box, you'll access the printer driver's dialog box. It allows you to change additional printer settings. Settings changed in the software application will usually override settings made in the printer driver.

Your printer driver's Properties dialog box includes three tabs (four tabs on Windows NT only).

Basic Tab

This tab allows you to specify number of copies, paper orientation, paper source, paper size, and image scaling size.

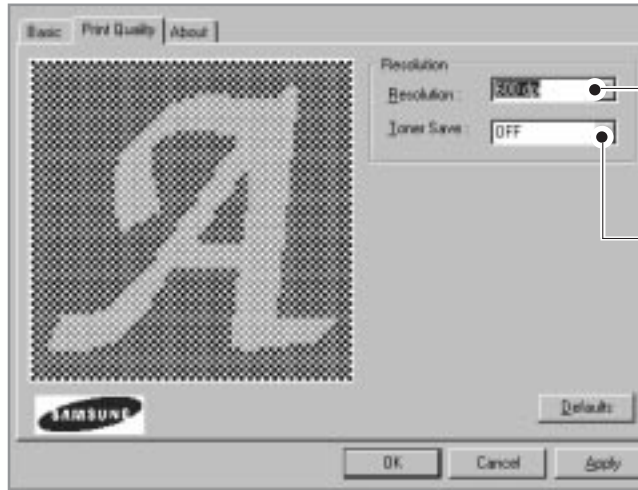


If you load paper into the manual feeder slot, select 'Manual Feed.'

This setting allows you to enlarge or reduce the image on the print page.

Print Quality Tab

This tab allows you to specify the print resolution.

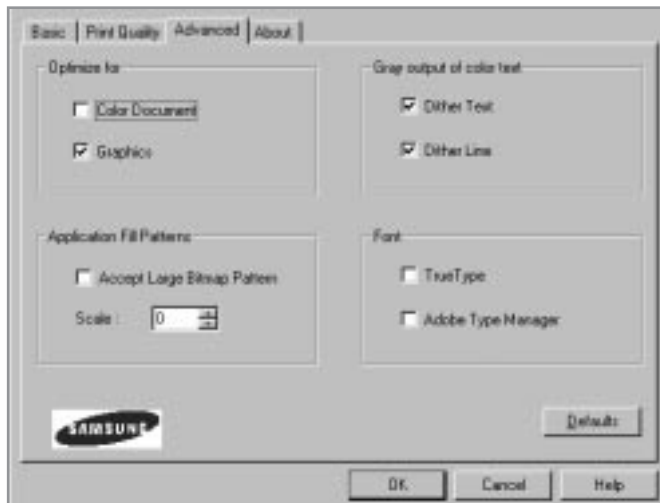


In general, higher resolution looks better but takes longer to print and requires more memory.

If you want to save toner when you are printing, select 'ON'.

Advanced Tab

If you are Windows NT user, you can see 'Advanced Tab', if you want to know more about 'Advanced Tab', click on the help button. The help screen gives detailed information about each menu.



About Tab

This tab shows the printer software version.

Using Help

Your printer driver includes comprehensive screen help. For detailed information about each setting, press F1 key except Windows 3.x.

Changing Printer Settings for All Documents

Changing the printer settings from your application program will change them for one document. If you want to change for all documents you print on this printer, open the printer Properties dialog box as shown below, then change the printer settings.

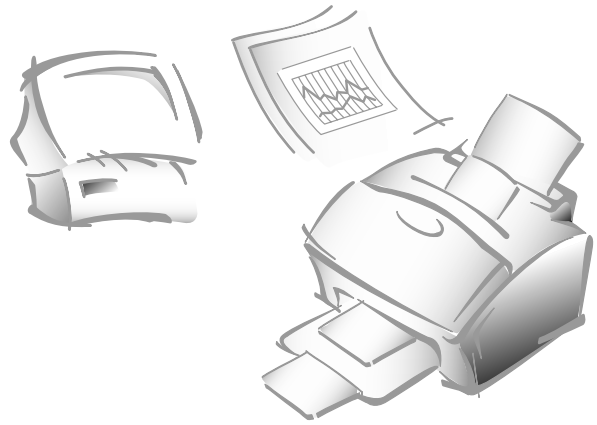
- ✓ Windows NT users should select properties via Application's Print Menu.

Windows 9x users should select Start, Settings, Printers. Then from the File menu, click Properties.

Windows 3.x users should select Program Manager, Main, Control Panel, Printers. Then click Setup.



Scanning



Overview

Scanning converts a photo or paper document into a computer image. Types of documents that you can scan include photos, drawings, magazine pages, newspaper articles, and just about any other type of single page image. You put the paper into the scanner, and then the computer and scanner work together to create a computer image.

After you have installed the supplied CD-ROM, you can use the machine as a black and white scanner. The CD-ROM contains the *SmarThru* program which is easy and convenient tool to manage your work with a scanned image. With *SmarThru*, you can quickly scan and save the image, make copies of part of the image, and use the image in creative projects, like newsletter, brochures, letterhead, and more. You can also share the scanned images electronically through E-mail, and fax. For details on how to use the *SmarThru* program, use the on-line help, or refer to the User's Guide which is contained in the CD-ROM.

You can also use other TWAIN-compliant image editing software application like SoftScan Pagies SE, Text Bridge, or Adobe Photoshop. The Samsung TWAIN for Scan window will be displayed when you choose Samsung TWAIN for Scan to scan documents or photographs from the TWAIN-compliant image editing application.

Scanning the Image

This section describes the basic procedures for scanning with a TWAIN-compliant image editing application.

1. Turn on your machine and PC, then start Windows.
2. Open your TWAIN-compliant image editing application.
3. Choose **Select Source** from the **File** menu.
4. Select **Samsung TWAIN for Scan** in the Select Source dialog box.
5. Open the **File** menu, and select **Acquire**. The Samsung TWAIN for Scan window will appear. For the window, see the next page.
6. Select the appropriate scanning options for the document or photograph you want to scan.

For more information on scanning controls, preview options, and other advanced scanning features, see page 3.4.

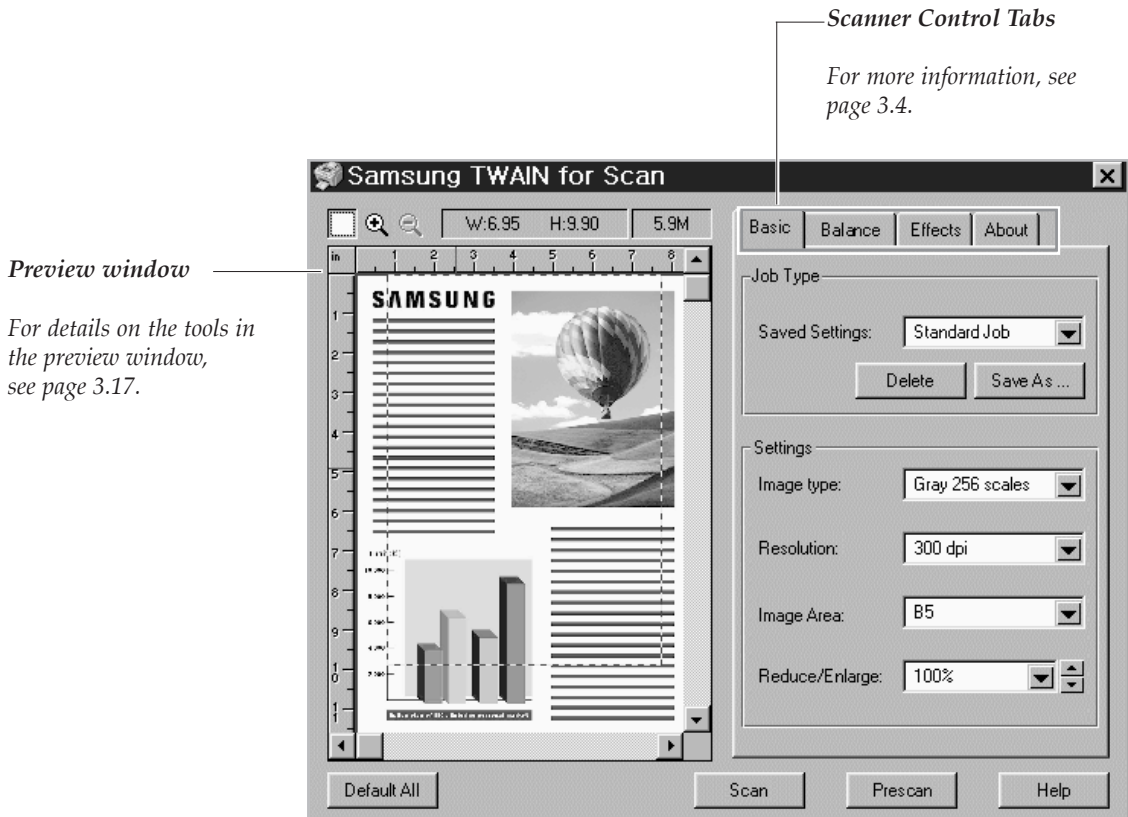
7. Load the document or photo in the document feeder of your machine.



8. Click on **Scan**. The document will be scanned and displayed in the image editing application.

Samsung TWAIN for Scan Window

The Samsung TWAIN for Scan window is used to view and modify the scanned image. Using the features of this window, various image processing options can be applied to the scanned image.



Using On-Line Help

You can refer to the Samsung TWAIN for Scan on-line help function for assistance. To access the on-line help, roll the course over the feature of the window the help is desired for. A yellow popup dialog box will appear. Click on the dialog box to access on-line help.

On-line Help contains information about using the menus and commands. Use **Help** anytime you need information on how to use a particular menu or command.

Scanner Control Tabs

You can adjust the settings for the document or photograph to be scanned prior to capturing the image using the features of the Scanner Control tabs.

Each of the tabs is described in detail in the following sections:

- for Basic tab, see page 3.4.
- for Balance tab, see page 3.8.
- for Effects tab, see page 3.14.

The About tab shows the version of the Samsung TWAIN for Scan application.

Basic Tab

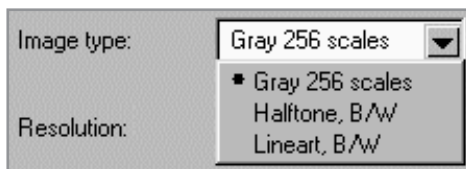
Job Type

This menu allows you to select the job type.



Image Type

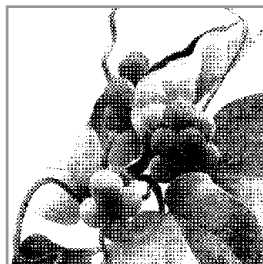
This menu specifies the mode in which the image is to be scanned in.



The following pictures show examples of the various scan modes.



Gray 256 scales



Halftone, B/W



Lineart, B/W

Gray 256 Scales

Images scanned in this mode will show up to 256 shades of gray. If high quality copies of photographs or other continuous tone originals are desired, Gray 256 Scales is the best choice.

Gray 256 Scales provides accurate representation of black and white, and intermediate gray shades between black and white, for each individual pixel. It actually provides 256 shades, representing white by the value 255 and black by the value zero, with progressively lighter intermediate shades of gray by values from 1 through 254.

Halftone B/W

This scan mode uses various combinations of black and white pixels to simulate gray scales. While not the same level of image quality as the Gray 256 Scales image type, this image type is good for continuous tone images where smaller file size is more important than ideal image quality.

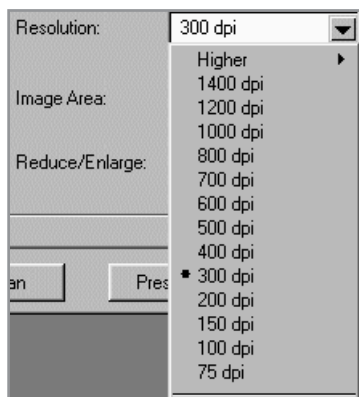
Lineart B/W

Lineart B/W mode is generally the best choice for printed text or pen-and-ink drawings. Like the Halftone B/W image type, this image type defines the state of each pixel in the image with one bit that is either on or off. For this reason, files created in this mode will require approximately the same amount of disk space as a Halftone B/W file.

✓ In both Halftone and Lineart modes, the resolution can only be set to 150, 200, or 300 dpi.

Resolution

The resolution setting determines the amount of information the scanner will capture in a resulting scanned image.



The resolution can be measured in dpi (dots per inch). The higher the resolution is, the finer the image detail and the bigger the image file size is. See the examples of images at 75 and 300 dpi.



300 dpi



75 dpi

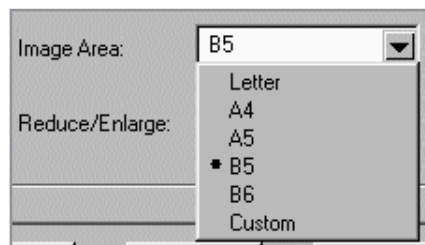
You can select any one of the resolutions shown on the **Resolution** menu, or specify your own resolution by selecting the **Custom** option which invokes the **Custom Resolution** dialog box.

To use the Custom Resolution dialog box, type the desired resolution (in dpi), and click **OK**. The custom resolution created will be displayed in the **Resolution** menu.

- ✓ **The Resolution settings can be restored by clicking Defaults at the bottom of the Basic tab.**

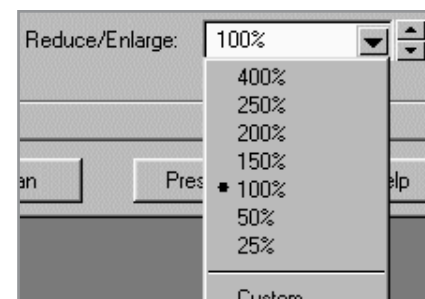
Image Area

You can select any size of scanning area on the image area menu. This reflects the selection frame on Preview window.



Reduce/Enlarge

This feature allows an image to be automatically enlarged or reduced as it is scanned. The default scale factor is 100%. The selected scaling factor, the range of which is dependent on the selected image type, affects the printed scan output.



- ✓ When scanning a printed image for screen display only, scale the image down to increase processing speed and decrease the file size.



Scaling 100%



Scaling 50%

Fixed scaling options are displayed in percentages of reduction or enlargement. Image width and height are scaled proportionally when fixed scaling factors are used. To scale to a size other than the fixed sizes, select the **Custom** option in the **Scaling** menu. The Custom Scaling dialog box will appear.

To change Height or Width text box values:

1. Insert the desired height or width value into the Height or Width edit boxes.
2. The units of measurement may be changed to inches, centimeters, millimeters, pixels, picas or percentages of the original image dimensions by selecting the desired unit of measurement from the **Units** drop-down list boxes to the right of the Height and Width text boxes.
3. To prevent distortion of the image when changing height and width values, the height and width values are automatically linked - you need only enter one value, either a Height or Width value. The other value will be computed and the image will resize proportionately.

- ✓ You can also change Height and Width values by directly adjusting the selection frame.
- ✓ Output image file size is proportional to both Height and Width. If both Height and Width values are doubled, then the image area and image file size will increase four-fold.
- ✓ Once you have confirmed or changed the size, resolution, and final scan boundary settings, the scanning software determines the size of the resulting scanned image and displays this information along with available hard disk space.

Balance Tab

Color Channel



The Color Channel radio buttons are used to specify the color channel in which to change the Highlight, Shadow and Midtone values.

The only channel available to be selected when using your machine to scan is the Gray channel. Red, Green and Blue are used for scanners capable of scanning documents in color.

Highlight



The Highlight value represents the lightest value in an image. All pixels above this point will be rendered as pure white. If you subsequently broaden the highlight points on the Level Adjustment graph, the pixels will be remapped within the new range, thus allowing you to see more detail in the image.

The Highlight scroll bar allows you to manually set a highlight level. The default for the Highlight settings is 255. You can increase or decrease the highlights in a particular image as needed by adjusting this scroll bar. The value in the adjacent box will change in the range 1 to 255 as the slider moves.

Shadow



The Shadow value represents the darkest value in an image. All pixels below this point will be rendered as pure black. If you subsequently broaden the shadow points on the Level Adjustment graph, the pixels will be remapped within the new range thus allowing you to see more detail in the image.

The default value for Shadow is 0. You can increase or decrease the shadows in a particular image as needed by adjusting this scroll bar.

Midtone



All optical devices such as monitors and scanners have some differences in their light sensitivity characteristics. Samsung TWAIN provides Midtone adjustment for you to compensate for these differences in your scanner, and it produces better scanned images.

To change the Midtone value, move the slider to the left or right to change the values in the adjacent text box. The value in the adjacent box will change in the range 0.1 to 10.0 as the slider moves.

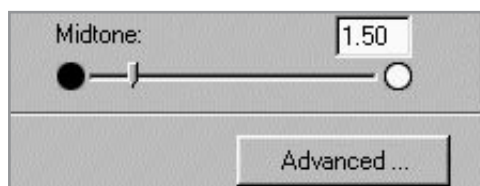
Ordinarily, good results can be obtained from your machine by leaving the slider at its default value of 1.00.

Advanced Selection

The advanced selection will present features that allow you to modify the Level Adjustment and the Tonal Map of the document.

For both the Level Adjustment and the Tonal Map functions, the window displayed contains small representations, known as thumbnail views, of the original and enhanced images (Samples 1 and 2).

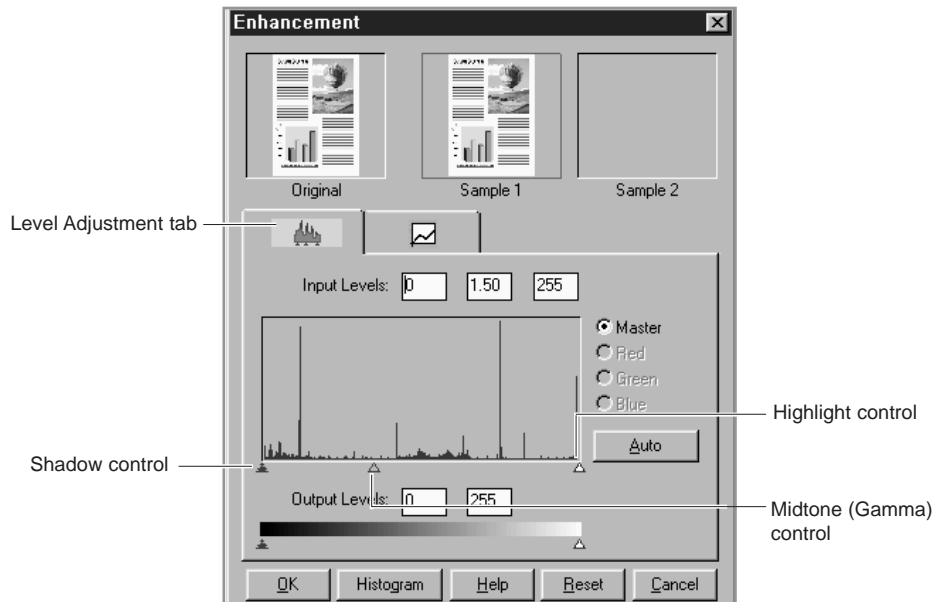
To activate the Level Adjustment or Tonal Map functions, click on the **Advanced...** button at the bottom of the Balance tab.



When this button is selected, the Level Adjustment window is displayed by default.

Level Adjustment

The Level Adjustment dialog box shows the distribution of brightness levels in your image. To adjust the histogram plot, drag the triangles, located below the horizontal bar to the desired values. The left (black) triangle changes the shadow levels. The right (white) triangle changes the highlight levels. The middle (gray) triangle controls the midtone levels.



By varying the Shadow and Highlight points you can change the relative shades and highlights of the image. The Shadow point represents the darkest value and the Highlight point is the brightest value.

The Midtone point represents the Gamma setting for your particular screen. On the histogram, the Shadow and Highlight scales are divided into 255 units.

Therefore, all pixels in the original that are darker than the current shadow point are now completely black in the enhanced image. Conversely, all pixels in the original that are brighter than the current highlight point are now completely white in the processed image.

Setting the highlight point to 200 renders all pixels greater than or equal to 200, on the original, completely white in the processed image. Similarly setting the Shadow point to 200 renders all points less than or equal to 200, on the original, completely black in the enhanced image. Photographers often refer to these effects as “high-key” or “low-key”. High-key is an image pushed to the white end, and low-key is an image pushed to the black end of the tone curve.

The Midtone is a relative measure of the gamma of your monitor. The scale for Midtone ranges from 0 to 255. The gamma curve is a geometric series. This means that at a value of 255 it tends to infinity.

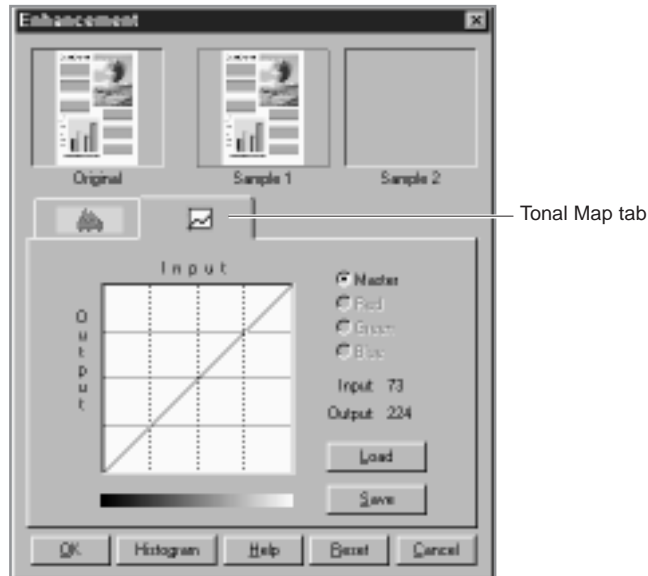
The Midtone is bound by the Shadow and Highlight terms and cannot exceed them at any time. So, if the Highlight is set to 255 and the Shadow is set to 0, a gamma of 1 is equal to a Midtone of 128. Similarly, if the Shadow is set at 200 (lower boundary) and the Highlight is set at 220 (upper boundary), a gamma of 1 is equal to a Midtone of 210.

Operation:

1. Select the **Advanced...** button on the **Balance** tab. This will display the Level adjustment window.
2. On the histogram, use the mouse key to click on the black, gray, or white triangles to make changes to the Shadow, Midtone and Highlight respectively.
3. To see the changes and compare them to the original previewed image, click on Sample 1 to see the enhanced image.
4. To make a second enhancement for comparison, click on Sample 2. Make new enhancements to the original. Compare the images of Sample 1 and 2.
5. After completing enhancement settings, click on the desired sample to choose the image
5. Click **OK** to save the changes and close the **Enhancement** dialog box. If you do not want to save the changes, click on the **Cancel** button to close the Enhancement dialog box. Click **Auto** button to allow the software to make appropriate highlight and shadow adjustments.

Tonal Map

If you select the Tonal Map tab, the following dialog box will be displayed.

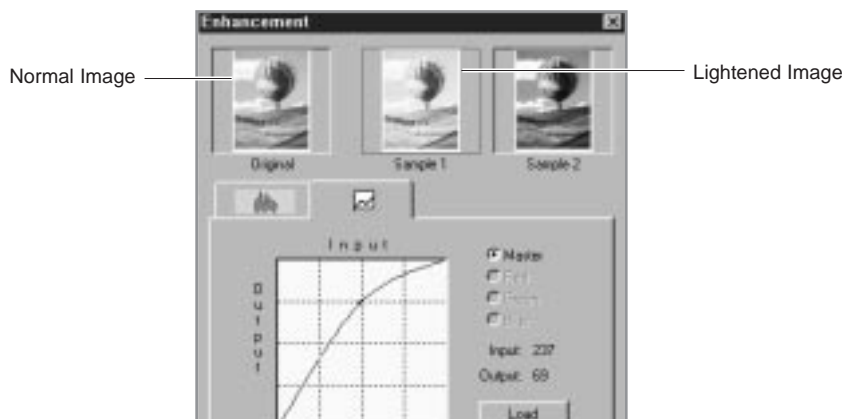


The Tonal Map is yet another way to adjust Highlight, Midtone, or Shadow levels in your images. When you open the Tonal Map dialog box, a tonal map consisting of a diagonally straight line appears. Notice that at every point on the default tonal map, the output shadow, midtone, and highlight brightness levels are equal to the input shadow, midtone, and highlight brightness levels.

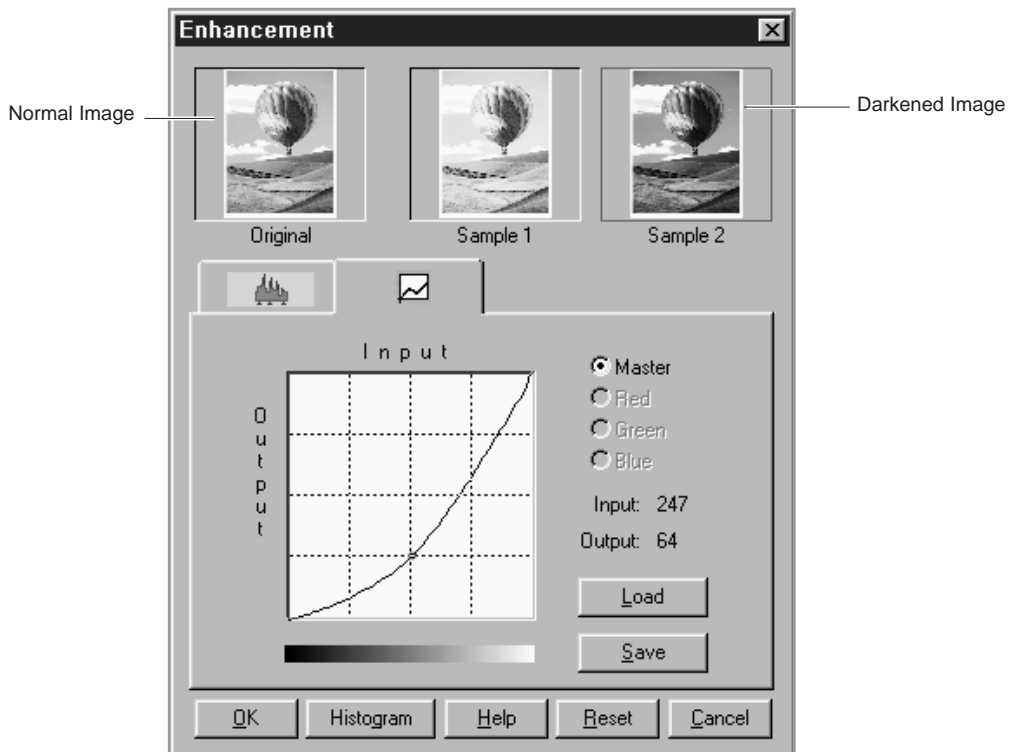
The shape and slant of the tonal map represent brightness level ratios between the input of the original image and the output image data. By clicking on the tonal map line, a hand-shaped cursor will appear which can be dragged to change the shape of the tonal map line.

The horizontal axis represents the original input brightness and the vertical axis represents the enhanced brightness. Values on either scale range from 0 to 255.

As shown in the figure below, if the curve is changed into a convex shape above the original diagonal, the enhanced image will be brighter than the original.



If the curve is changed into a concave shape below the original diagonal, the enhanced image will be darker than the original.



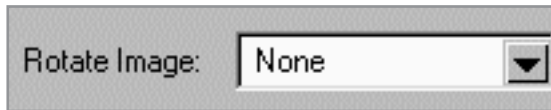
Operation:

1. Click on the Tonal Map icon in the Preview window or the **Tonal Map** tab in the Enhancement dialog box. The Tonal Map dialog box will appear.
2. Click on the Tonal Map curve, an indicator appears which can then be dragged to change the shape of the curve.
 - a) If a previously saved Tonal Map is desired, select the **Load** button. An Open dialog box appears for you to open the desired file.
 - b) Or, click on the **Reset** button to return the Tonal Map to the default diagonal as in the original.
 - c) Click the **Save** button to save the changes as a customized setting. A Save As dialog box will appear upon selection of this button. Enter the name for the customized curve and click on the **OK** button.
3. Select the **Histogram** button to see a histogram of the changes made.
4. Select the **OK** button to accept all the changes or the **Cancel** button to abandon all unsaved changes.

Effects Tab

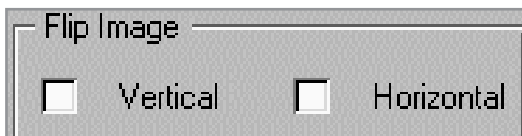
The features of this tab are used to apply various visual modifications to the scanned image.

Rotate Image



This selection provides the ability to rotate an image. The rotation mechanism rotates an image clockwise in 90° increments.

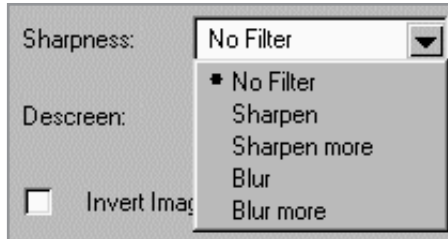
Flip Image



This selection provides the ability to flip an image. The flipping mechanism flips an image about the horizontal or vertical axis.

Sharpness

Sharpness is typically useful for high-contrast images which soften or sharpen edges and boundaries of an image.



No Filter

This is the default filter option. No filtering will take place when using this option.

Sharpen

This selection emphasizes the edges of an image. It sharpens the image boundaries by increasing the relative contrast between adjacent pixels. In general, sharpen filters should only be used when you want to accentuate the differences between one area and another.

Sharpen More

This option further emphasizes the edges of an image. This option produces a much stronger contrast than the Sharpen option.

Blur

This selection softens the image by smoothing out any sharp transitions in intensity between two adjacent pixels.

Blur More

This option further softens the image by performing the same function as the Blur option, but to a greater extent.

✓ **If you blur the image too much, you will risk losing texture and depth in the image.**

Descreen

This selection is used to eliminate moire patterns from the output image. Moire occurs as a result of differences in the screen pattern used to print document and the scanner electronics. Moire may appear as checkered patterns bands or dots. Descreen preprocessing can minimize the transfer of moire patterns into your image file.



Besides a default setting of No Descreen, The Descreen selector provides three grades of descreen preprocessing as described below.

No Descreen

No descreening.

Art print (175 lpi)

The Art print selection is used to smooth the fine dot pattern found in high quality art prints and magazines made in resolution higher than 200 dpi.

Magazine (133 lpi)

The Magazine selection is used to smooth the fine dot pattern found in glossy magazines made in resolution higher than 200 dpi.

Newspaper (88 lpi)

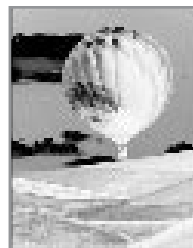
The Newspaper selection smooth the coarse grain pattern commonly found in newspaper images made in resolution higher than 200 dpi.

Invert Image

This function inverts all the tone values, providing a photographic negative of the original. This effect is similar to using the Tonal Map to tonally invert the image.



Normal image



Invert image

Preview Window

After adjusting the settings in the Scanner Control window, choose any one of the tools in the Preview window to further enhance the image. The following is detailed information about the tools available in the Preview window.

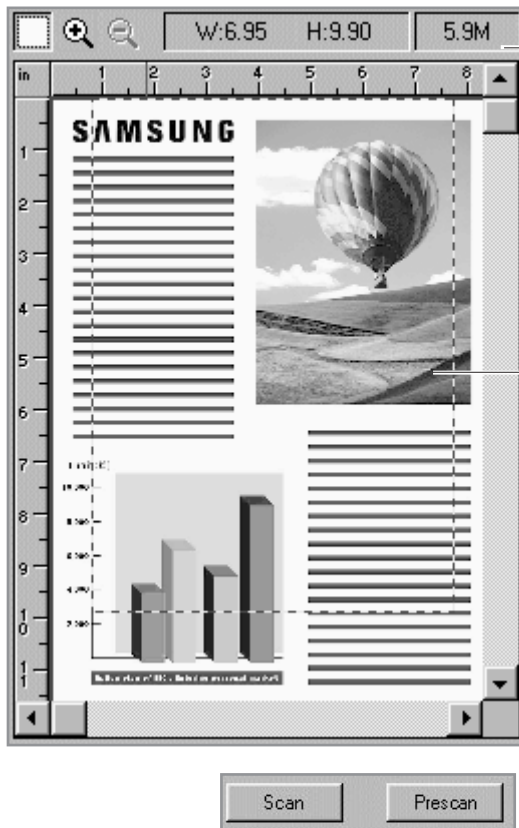


Image Control tools

For information, see page 3.18.

Preview window

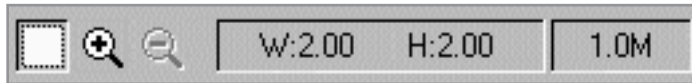
Used to view the prescanned document.

Any changes made to the document are seen here.

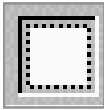
Prescan and Scan buttons

For information, see page 3.20.

Image Control Tools



The Image Control tools are used to control the image displayed in the preview window. The functions of these tools are described below.



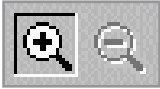
Frame Tool

After a preview image has been created, you can define the boundaries of the area to be included in your final scan by using the Frame tool.

Use the Frame tool to select a rectangular portion (selection frame), or select the entire preview screen, for the final scan boundaries. When you select the **Scan** button, only the area within the selection frame will be included in the final scan.

To use the Frame tool:

1. Select the Frame tool by clicking the Frame tool icon.
 2. Drag the cursor to the preview area and release the mouse button when the selection frame is in the desired position.
 3. To adjust the selection frame size or shape, drag any edge or corner of the frame in or out. Alternatively, hold down the **Shift** key and the mouse key on one of the sides of the frame and then move the cursor accordingly. This action will contract or expand the entire frame.
 4. To move the selection frame to a different area of the image without changing its size or shape, place the cursor within the selection frame and drag it to the desired location.
 5. To create an entirely new selection frame, place the cursor outside the existing selection frame and drag diagonally. The first selection frame will disappear while the second one remains.
- ✓ If you hold down the **Shift** key and drag the mouse diagonally, the sides of the selection frame will resize proportionally.



Zoom In and Out Tools

The Zoom In and Out tools allow you to zoom in or out on an image within the Preview window; zooming in (the + sign appears on the zoom cursor) enlarges the view of the active image so that you can work on small details in an image. Zooming out (the - sign appears on the zoom cursor) reduces the view of the active image.

To use the Zoom In tool:

1. Select the Zoom tool by clicking the Zoom In tool icon.
2. Drag the cursor to the preview area. The cursor will change to a magnifying glass whenever it is in the preview space.
3. Zoom in (magnify an area) by positioning the cursor on an area of interest in the preview area and clicking the left mouse button. The preview area will be doubled in size. Click again and the area will again be enlarged by a factor of 100%. By repeating this process, you can enlarge the preview display of the image up to 800% of its original size.

As an alternative to the method outlined above, select the Zoom tool and then, while holding the mouse key down, drag the cursor over the area you want to enlarge. A solid frame, defining the area of enlargement, will appear while the mouse key is being held down. Upon release of the mouse key, the defined area will be enlarged.

4. Use the scroll bars to view hidden areas of the displayed preview image.

To use the Zoom Out tool:

1. Select the Zoom Out tool by clicking the Zoom Out tool icon.
2. Drag the cursor to the preview area. The cursor will change to a magnifying glass whenever it is in the preview space.
3. Zoom out by positioning the cursor in the preview area and clicking the left mouse button.

✓ **The Zoom In and Out tools do not affect the image produced by the Scan control. It only affects the Preview display.**

Width and Height Indicators



The Width and Height indicators will display the width and height of the frame defined with the Frame tool.

File Size Indicator



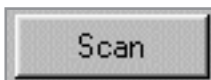
The file size indicator will display the file size that will result for the scanned image defined with Frame tool.

Prescan Button



The Prescan button is used to obtain a low resolution preview of the document. The prescanned document will appear in the Preview Window.

Scan Button



The Scan button is used to obtain the final scan of the document after all of the enhancement features have been applied to the prescanned document.

When Scan is selected, the scanned image does not appear in the Preview Window. It appears in the TWAIN compliant application from which the scan was originated.

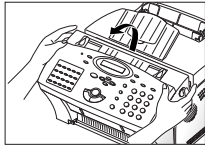
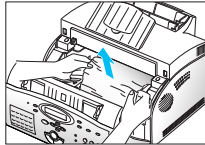


Troubleshooting

Fixing Problems

Below are the problems you can solve by yourself. If not, call for service.

Printer Problems

Symptom	Cause and Solution
The printer does not print.	<ul style="list-style-type: none">• The printer cable is not connected properly. Check the printer cable connection.• The printer cable is defective. Swap the cable with one known to work.• The port setting is incorrect. Check the Windows printer settings to make sure that the print job is being sent to the correct port (for example, LPT1).• The image cartridge is not installed properly. Remove and reinsert the image cartridge.• The printer may be configured incorrectly. Check the application to make sure that all print settings are correct.• The printer driver may be incorrectly installed. Uninstall the MFP driver and reinstall the MFP driver. Then try printing a test page. Refer to 'Uninstalling SmarThru Software' on page 1.6• A paper jam has occurred. Remove the jammed paper. If there is resistance to the paper, and it does not move immediately when you pull, or if the paper is jammed inside the machine, stop pulling. <ol style="list-style-type: none">1. Pulling the cover release button toward you, open the cover, then remove the image cartridge.2. Gently pull the paper toward you. Check that there is no other paper in the printer.  

Printer Problems (Continued)

Symptom	Cause and Solution
The paper is not fed into the printer.	<ul style="list-style-type: none"> • Paper has not been inserted correctly. Remove and reinsert the paper correctly (refer to 'Loading Paper' on page 1.13). • There is too much paper in the automatic paper feeder. Remove some of the paper from the automatic paper feeder.
Half of the page is blank.	<ul style="list-style-type: none"> • The page layout is too complex. Simplify the page layout and remove any unnecessary graphics from the document if possible. • The page orientation setting may be incorrect. Change the page orientation in the Printer Properties dialog box. • The paper size and the software paper size settings do not match. Insert the correct paper into the printer or change the software paper size settings. • Scaling may be set to less than 100%. Change the Scaling setting in the Printer Properties dialog box. • The printer cable specifications may be incorrect. Use or replace the cable with an IEEE-1284 rated cable.
The printer prints the wrong data, or it prints incorrect characters.	<ul style="list-style-type: none"> • The printer cable might not be connected properly. Check the printer cable connection. • There may be a problem with the printer driver software. Exit Windows and reboot the computer. Turn the printer off and then back on again. • The printer cable specifications may be incorrect. Use or replace the cable with an IEEE-1284 rated cable.
The paper keeps jamming.	<ul style="list-style-type: none"> • There is too much paper in the automatic paper feeder. Remove some of the paper from the automatic paper feeder. (If printing onto transparencies, or labels, insert them one at a time in the manual feeder. • The paper setting method may be incorrect. If printing onto envelopes, insert the envelopes so that there is a gap of approximately 1 mm (1/32") between the left and right edge of the envelopes at the paper guide.

Symptom	Cause and Solution
Printing is too slow.	<ul style="list-style-type: none"> • If using Windows 3.x, Print Manager may be disabled. From the Control Panel Printers menu, check the Use Print Manager box. • If using Windows 3.1x, the Background Printing item in the Option menu of Print Manager may be set incorrectly. Select Background Printing from the Option menu in the Print Manager. • If using Windows 9x, the Spooling Setting may be set incorrectly. From the Start menu, select Settings and Printers. Click your printer icon with the right mouse button, select Properties, click the Details tab, and then click the Spool Settings button. Select the desired spool setting from the available choices. • If you are using Windows NT, the Scheduling setting may be set incorrectly. From the Start menu, select Settings and Printers. Click your printer icon with the right mouse button, select Properties, click the Scheduling tab. Then, select the desired scheduling setting from the available choices.

Print Quality Problems

Symptom	Cause and Solution
White page or printout too light to read	<ul style="list-style-type: none"> • Toner is low or empty. Replace the image cartridge.
Irregular faded patches of print	<ul style="list-style-type: none"> • There is a paper quality problem. Use only paper that meets the specifications required by the printer. • Toner may be unevenly distributed. Remove the image cartridge and shake it gently to evenly distribute the toner. Then replace the image cartridge.

Symptom	Cause and Solution
Black staining	<ul style="list-style-type: none"> • There is a paper quality problem. Use only paper that meets printer specifications. • An image cartridge from another printer has been installed. Always use the same image cartridge with the same printer. Using a cartridge that has already been used in another printer may not give satisfactory results.
Character voids	<ul style="list-style-type: none"> • The paper may be too dry. Try printing with a different batch of paper.
Background scatter	<ul style="list-style-type: none"> • The paper may be too damp. Try printing with a different batch of paper. Do not open packages of paper until necessary so that the paper does not absorb too much moisture from the air. • Printing over uneven surfaces. If printing onto envelopes, change your printing layout to avoid printing over areas that have overlapping seams on the reverse side.
Missing characters	<ul style="list-style-type: none"> • The paper may be too damp. Try printing with a different batch of paper. Do not open packages of paper until necessary so that the paper does not absorb too much moisture from the air.
Back of printout dirty	<ul style="list-style-type: none"> • The transfer roller may be dirty. Print a few blank pages to clean the transfer roller.
Incorrect fonts	<ul style="list-style-type: none"> • True Type fonts may be disabled (Windows 3.x). Use the Fonts dialog box in the Control Panel to enable True Type fonts.
Faded graphics	<ul style="list-style-type: none"> • Toner may be low. Remove the image cartridge and shake it gently to evenly distribute the toner. Then replace the image cartridge. Have a spare image cartridge in preparation for the toner running out.

Others Problems

Symptom	Cause and Solution
<ul style="list-style-type: none"> • There was an error writing to LPT1: for the printer: The parameter is incorrect. • COM port initialization failed. Check COM port parameters in Modem properties dialog • Modem initialization failed. Switch on the modem and check cable connection. • Device can't be set to the H/W mode you want. • Port is disabled. Check if the port is properly connected, or power is on then restart your computer • TWAIN error occurred • [Critical]: TWAIN is not available. • There were critical errors. Program will not continue. 	<ul style="list-style-type: none"> • While an application use LPT1 or SmarThru Fax Port, the other application can't use them concurrently. So if "Automatically answer for incoming calls after (rings):" option is checked of Fax Gate Properties, You can't scan images or print documents. If you want to scan or print, uncheck the option and restart SmarThru. If "Automatically answer for incoming calls after(rings):" option is not checked, one of printing, scanning, faxing may be already processing and another job try to process. Then cancel one of them, redo canceled job after another job is finished. • The MFP does not allow dual job, so printing, scanning faxing can't process concurrently. Cancel and redo later job after the MFP finishes current processing.





LASER Facsimile

User's Guide
Setup and Operation

Msys 5200





Thank you for purchasing Samsung Msys5200—the multifunction office product for your home office and the whole family. We are sure that Samsung Msys5200 will provide all you need in one machine.

Samsung Msys5200 combines these office machines:

- Plain paper fax*
- Copier*
- Laser printer*
- Scanner*

Enjoy your new Samsung Msys5200!

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- IBM is a trademark of International Business Machines.
- Centronics is a trademark of Centronics Data Computer.
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Important Safety Information

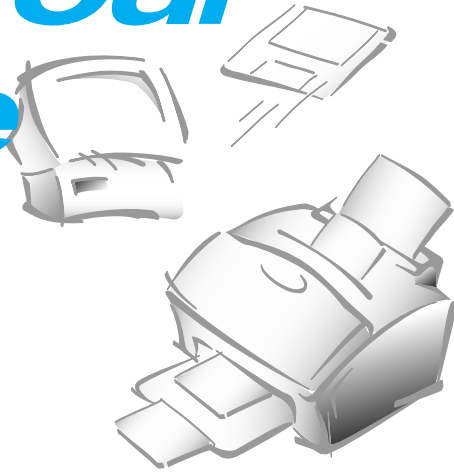
 Always be careful when using the machine. To reduce the risk of fire, electrical shock, and other injuries, keep these safety considerations in mind when installing, using, and maintaining your machine:

- **Stability.** Place the machine on a secure, stable surface. The machine can cause serious damage if it falls.
- **Power Supply.** Provide the correct power to the machine, as listed on its back. If you aren't sure of the type of power that's supplied to your home or office, call your electric company.
- **Grounding.** If the plug has three prongs, it must be plugged into a grounded (three hole) outlet. Grounded plugs and outlets are designed for your safety—don't try to make a three-prong plug fit into a two-prong outlet by modifying the plug or outlet in any way. If you can't insert the plug into your wall outlet easily, the outlet should be inspected by a qualified electrician.
- **Overload.** Don't plug too many electrical devices into a wall outlet or extension cord. An overloaded outlet is a fire and electrical shock hazard.
- **Cleaning.** Before cleaning the machine, unplug it from both the power outlet and the telephone jack. Clean exposed parts with a soft cloth slightly dampened with water. Don't use aerosol cleaners.
- **Thunderstorms.** Unplug electrical appliances during thunderstorms. Avoid using any telephone (except a cordless model) during a thunderstorm, since there's a small chance you could get an electrical shock from lightning.
- **Gas Leaks.** Never use any telephone close to a gas leak. If you think gas is leaking, call the gas company immediately, but use a telephone far away from the leak area. A small electrical spark in the telephone could cause a fire.

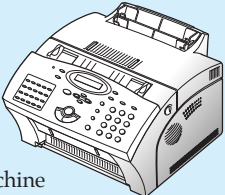
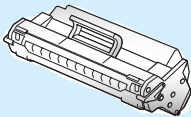
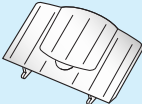
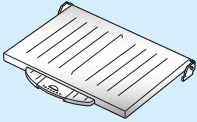
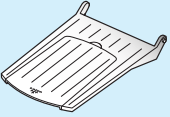

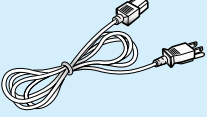
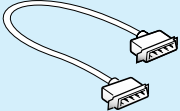
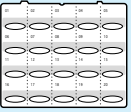





Getting Started

Set Up Your Machine



Unpacking

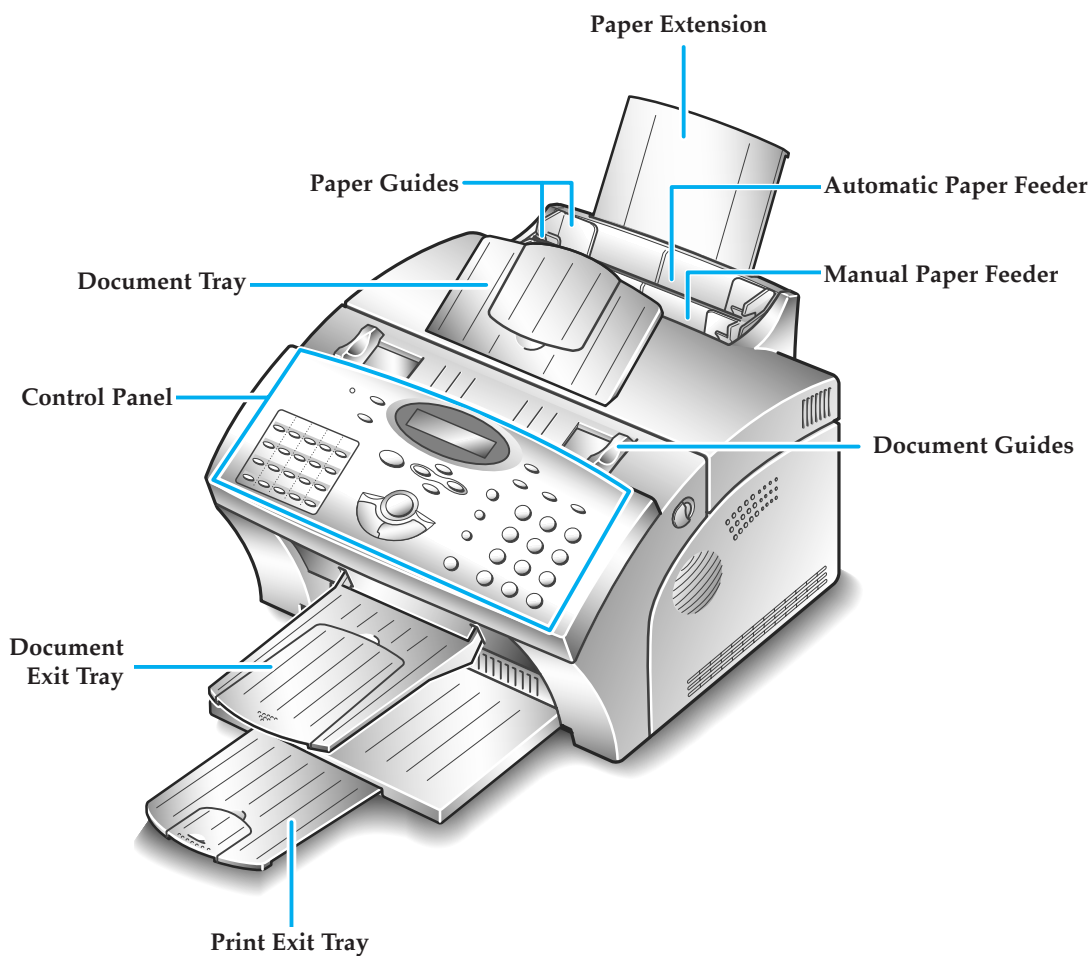
 Machine	 Toner cartridge	 Document tray	 Printer exit tray
 Document exit tray	 Telephone line cord *1	 AC power cord *1	 Printer Cable
 One-touch Label	 User's Guide (Setup and Operation)	 User's Guide (Application)	 CD-ROM

*1 These parts may look different. The appearance varies according to country.

Control Locations and Functions

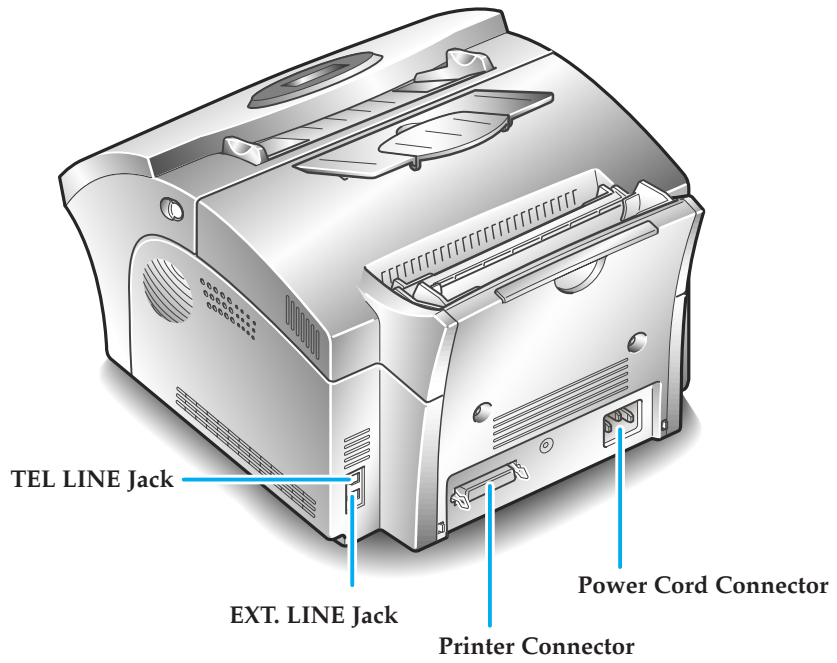
Take a moment to familiarize yourself with the main components and understand their functions.

Front View

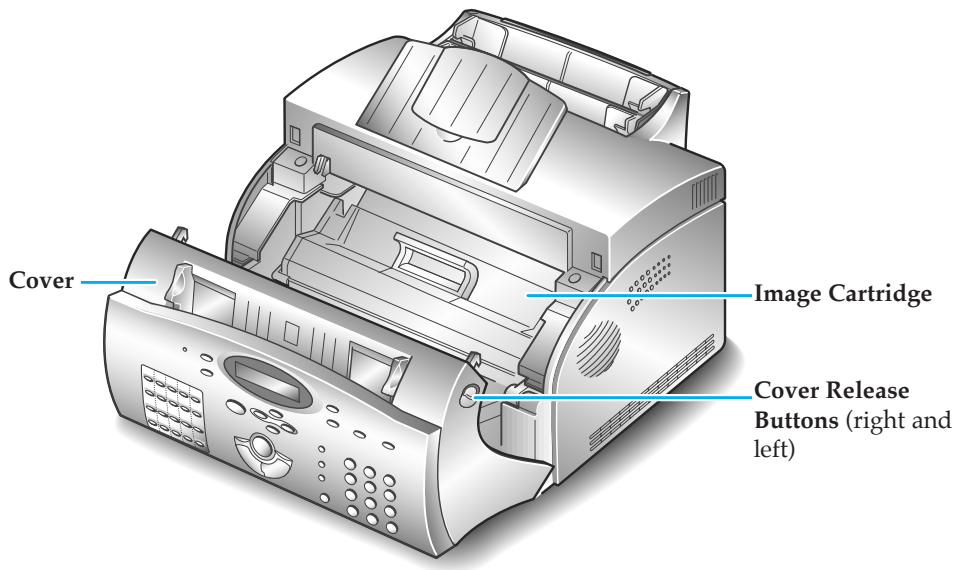


Note: Your machine may look slightly different than the illustration.

Rear View



Inside



Choosing a Location

To help guarantee trouble-free operation of your machine, place it on a flat, stable surface near your workstation. Leave enough space to allow for easy paper loading, paper out and opening the front cover.

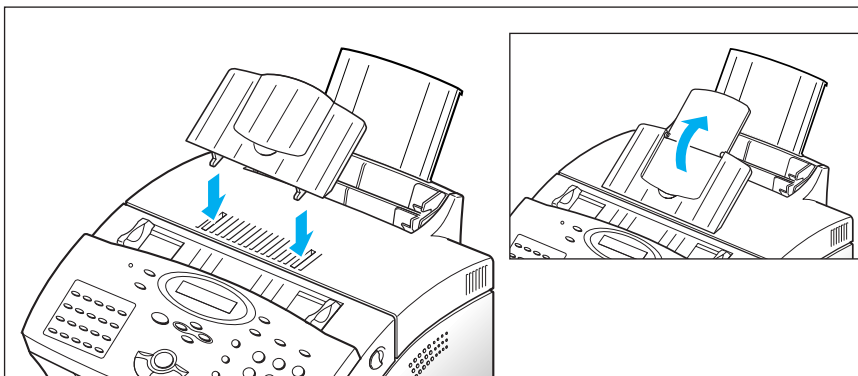
Do not place your machine:

- In direct sunlight.
- Near heat sources or air conditioners.
- In dusty or dirty environments.

Setting Up Your Machine

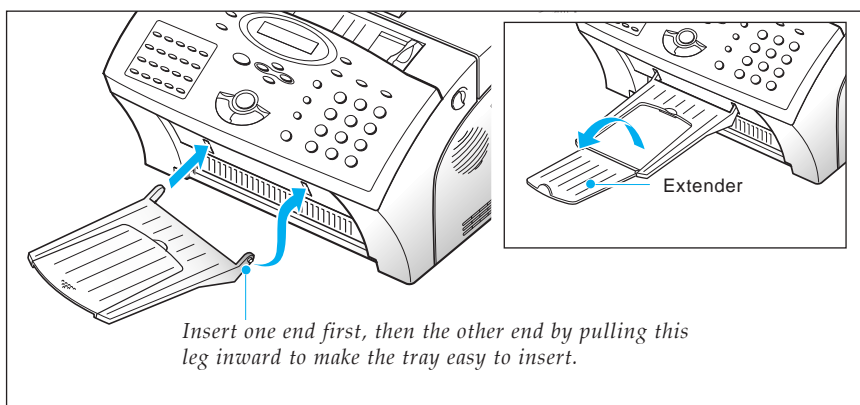
Document Tray

Insert two tabs on the tray into the slots as shown. Fold out the extender on the tray, if necessary.



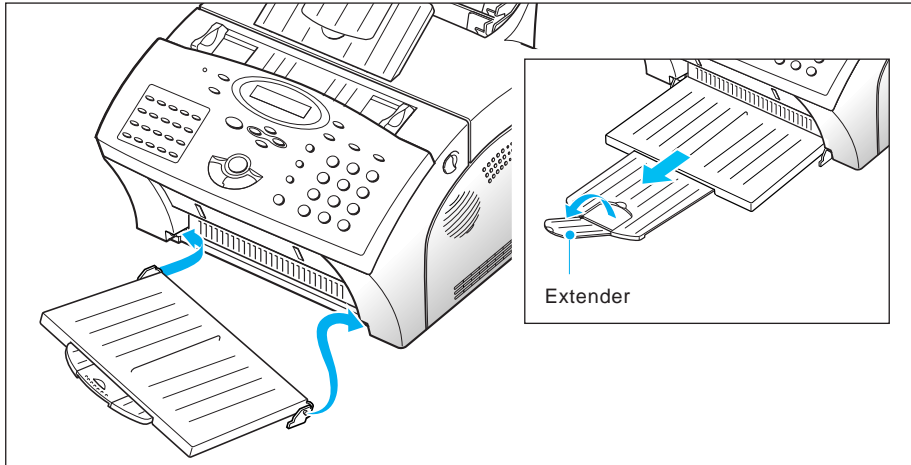
Document Exit Tray

Insert the two tabs on the document exit tray into the slots on the front of your machine. Fold out the extender, if necessary.



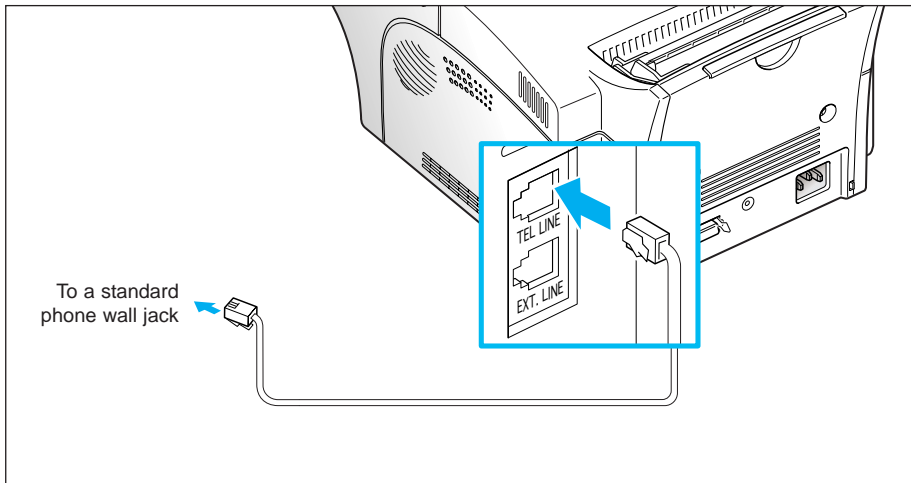
Printer Exit Tray

Holding the flexible side end, insert two tabs on the side ends into the corresponding slots. Fold out the extender, if necessary.



Telephone Line

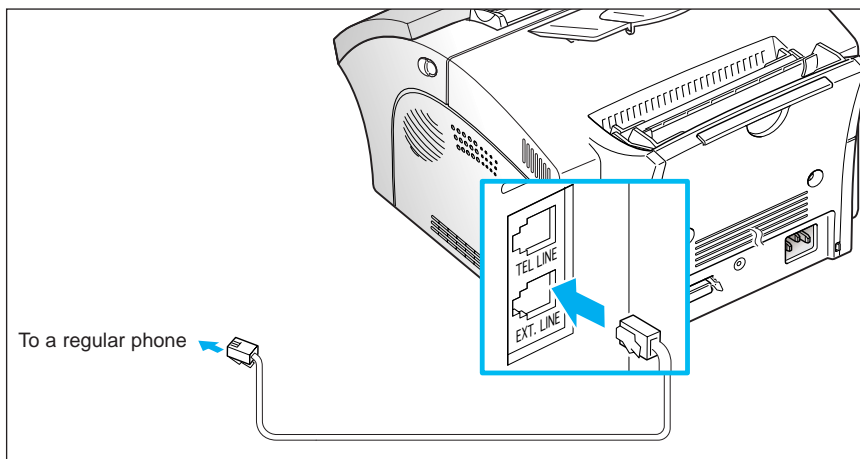
Plug one end of the telephone line cord into the TEL LINE jack and the other end into a standard phone wall jack.



Extension Phone

If you want to use a regular phone or answering machine with your machine, connect the phone into the EXT.LINE jack.

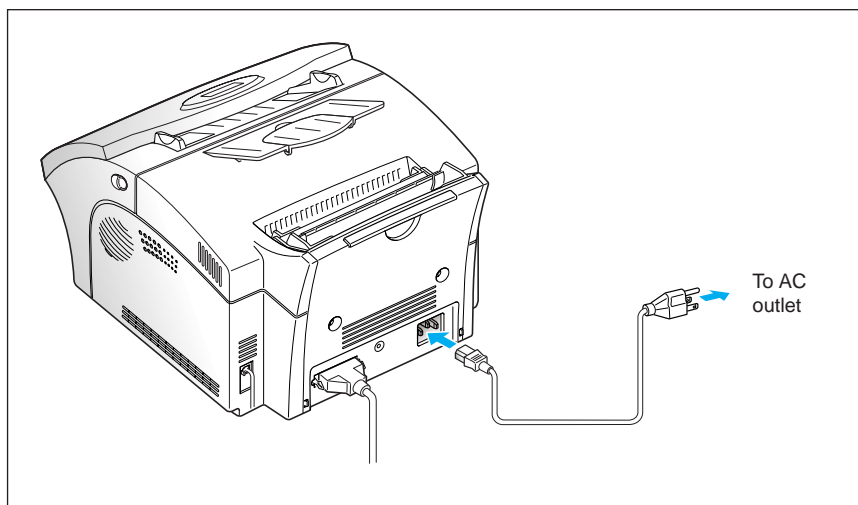
Plug the cord of your extension phone or answering machine into the socket marked EXT.LINE on the back of the machine.



AC Power Cord

Plug one end of the cord into the back of the machine and the other end into a standard AC power outlet.

The machine turns on. If there is no cartridge installed, or no paper, the display shows 'DOOR OPEN OR NO TONER' or [NO PAPER].



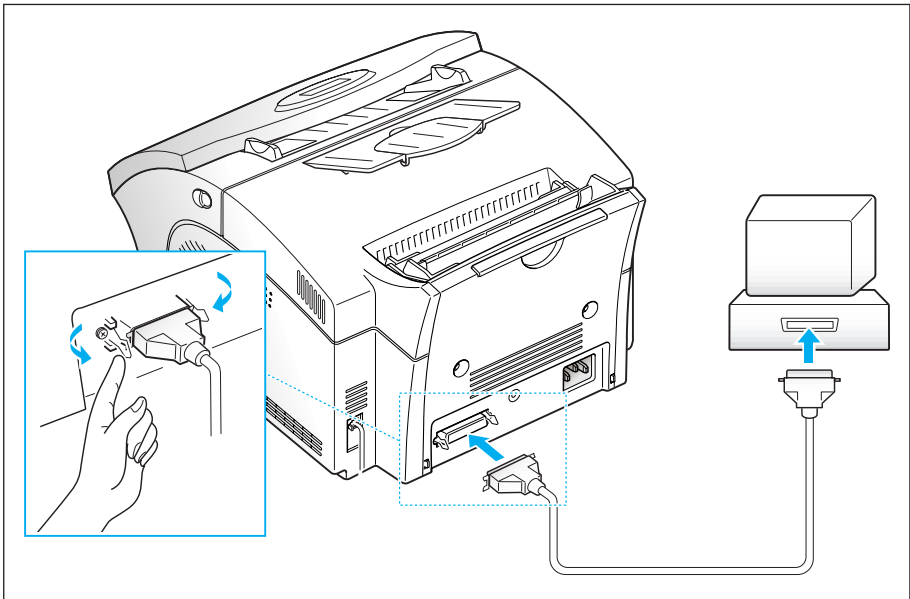
If you want to turn it off, unplug the power cord.

Printer Cable

Your Machine has a parallel interface port, which allows you to use it with IBM PCs and compatible computers. You have to purchase a Centronics parallel interface cable that supports bi-directional communications (IEEE standard 1284). Ask your dealer for assistance if you need help selecting the right cable.

To connect the printer to the computer, follow the steps below:

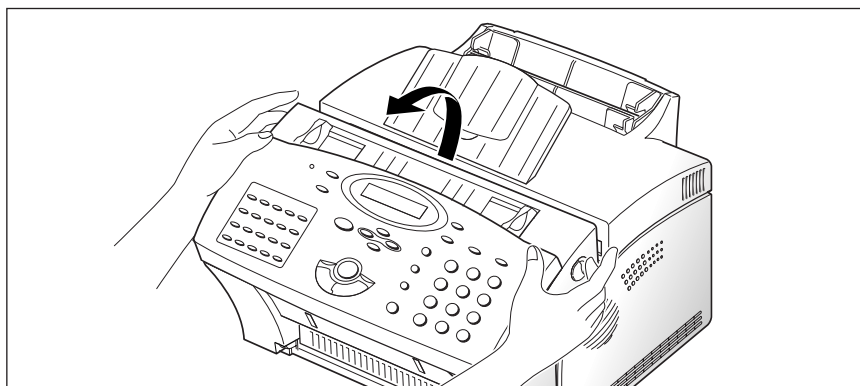
- 1. Make sure that both the machine and the computer are turned off.**
- 2. Plug the cable into the connector on the back of the machine.** Push the metal clips down to fit inside the notches on the cable plug.



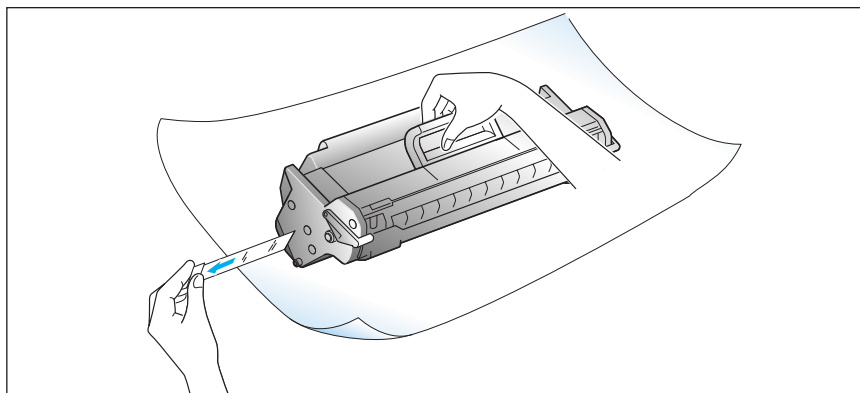
- 3. Connect the other end of the cable to the parallel interface port on your computer.** See your computer documentation if you need help.

Installing the Image Cartridge

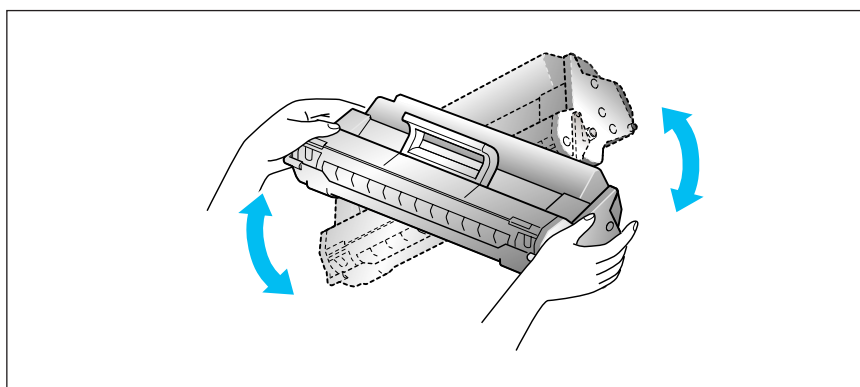
1. Pulling the cover release button toward you, open the cover.



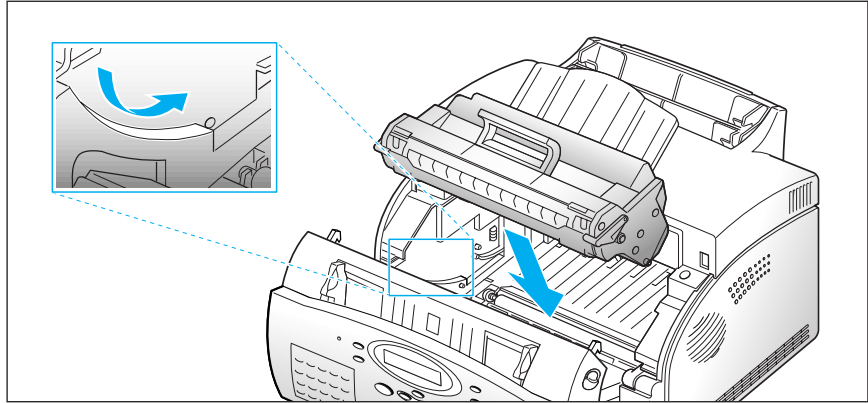
2. Unpack the image cartridge, then carefully remove the sealing tape.



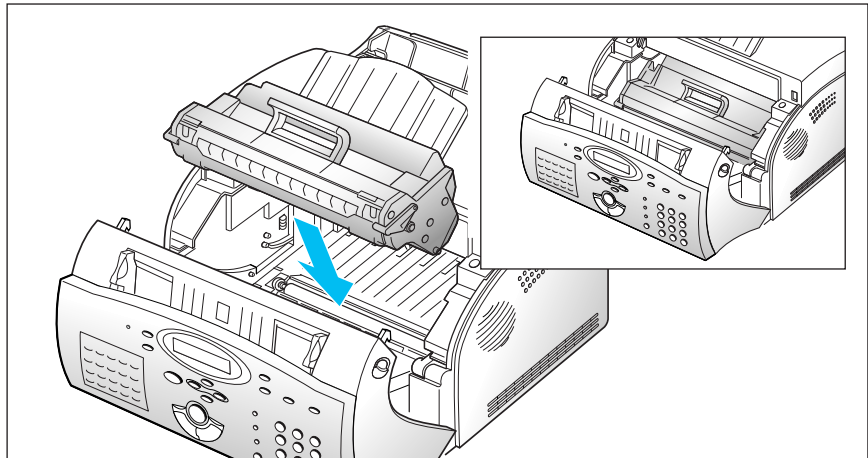
3. Shake the cartridge from side to side 5 or 6 times to distribute the toner evenly inside the cartridge.



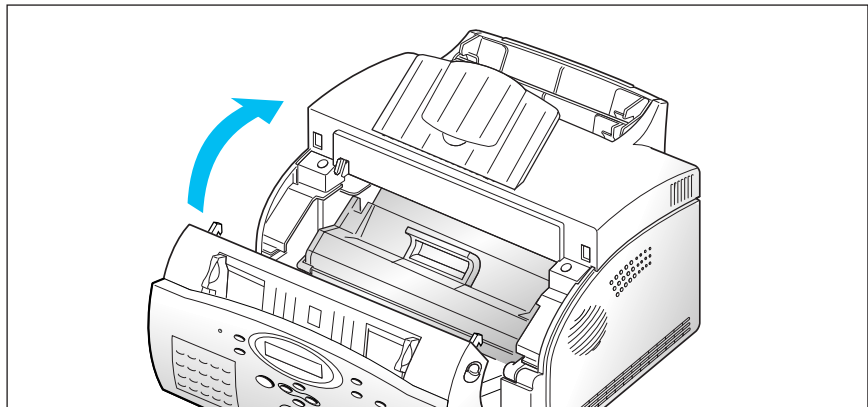
4. Find the cartridge slots inside the printer, one on each side.



5. Grasp the handle and slide the cartridge down between the cartridge slots, until it drops into place.



6. Close the cover. Make sure that the cover is securely closed.



Loading Paper

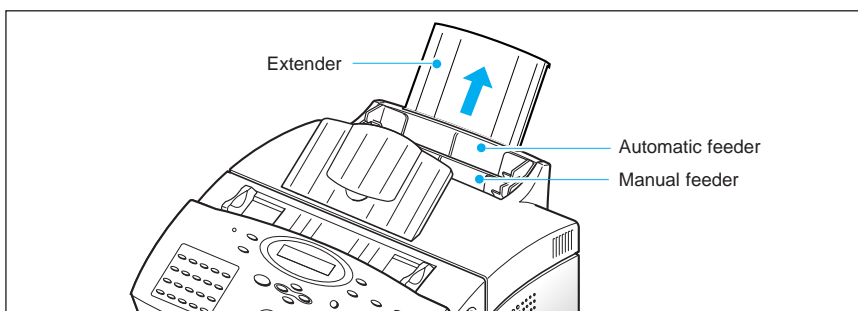
For best results, use high quality xerographic copier paper.

Using the Automatic Paper Feeder

You can stack paper, envelopes, card stocks, labels, or transparencies in the automatic paper feeder to feed automatically. The automatic feeder can hold a maximum of 150 sheets of plain paper, and 5 envelopes or other print media. The maximum capacity may reduce, depending on the thickness.

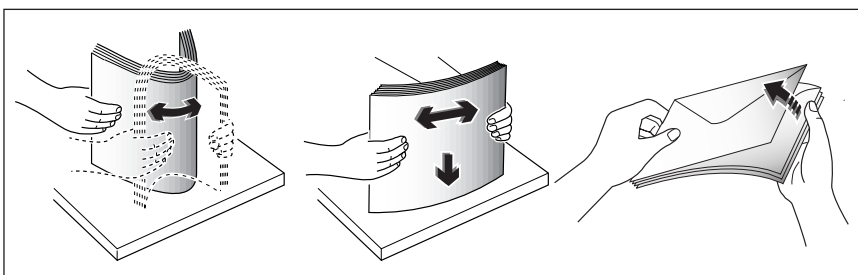
Note: If you experience feeding problems, try printing one at a time from the manual feeder. See page 1.14.

1. Pull the extender on the automatic paper feeder all the way up.



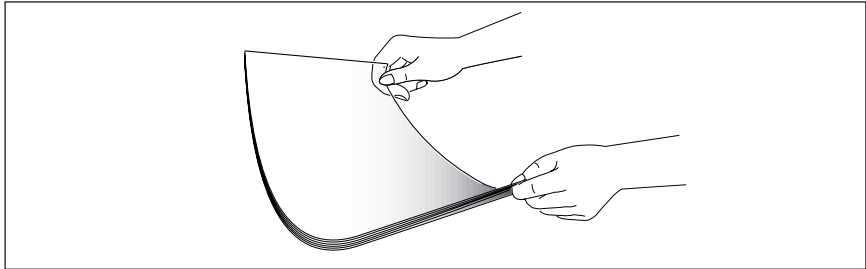
2. Prepare the print material for loading.

- For paper and envelopes:
 - Flex paper or fan envelopes back and forth. Do not fold or crease the paper. Straighten the edges on a level surface.

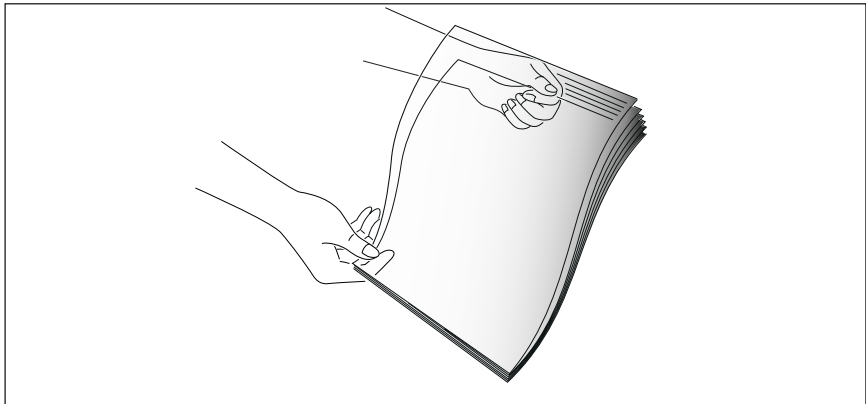


Note: If envelopes jam while printing, try reducing the number of envelopes in the automatic feeder.

- For transparencies:
 - Hold the transparencies by the edges and avoid touching the print side.

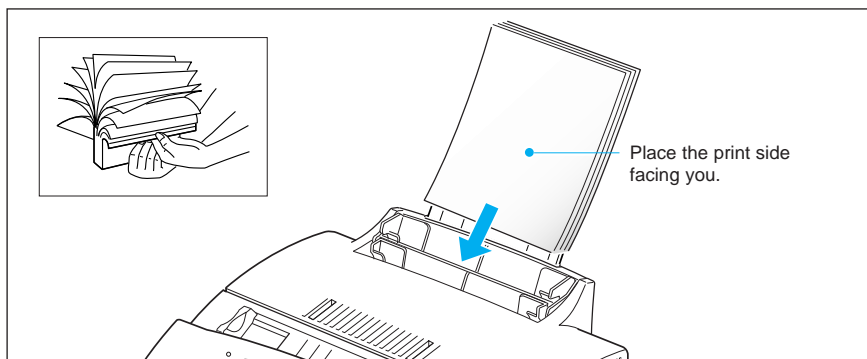


- Fan the stack of transparencies to prevent feeding failures. Be careful not to scratch or leave fingerprints on the print sides.

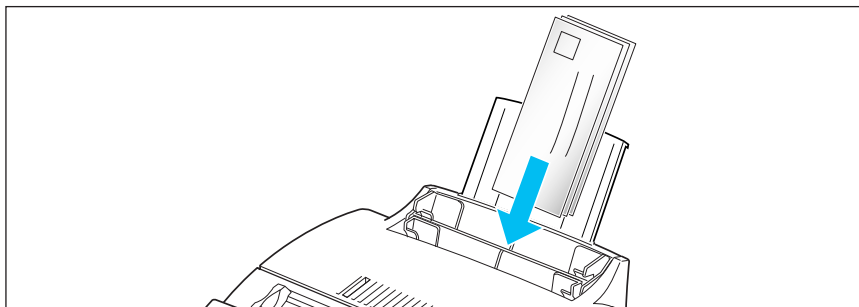


3. Load the print material in the automatic feeder. Do not load too much print material. Do not mix types. See the following directions to load each type of print material.

- Load paper or transparencies with the print side facing you.

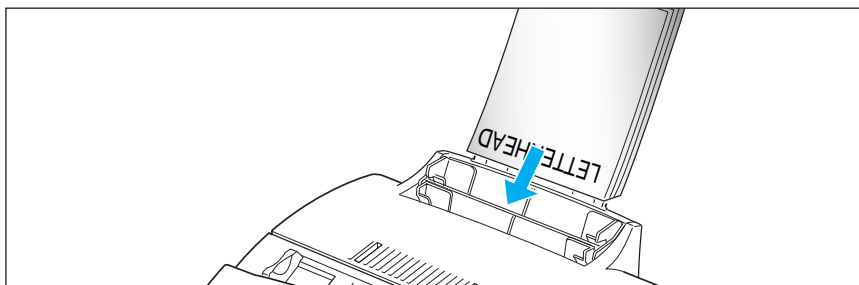


- Load envelopes with the flap side facing away from you. The stamp area is on the left side. The end of the envelope with the stamp area enters the feeder last.

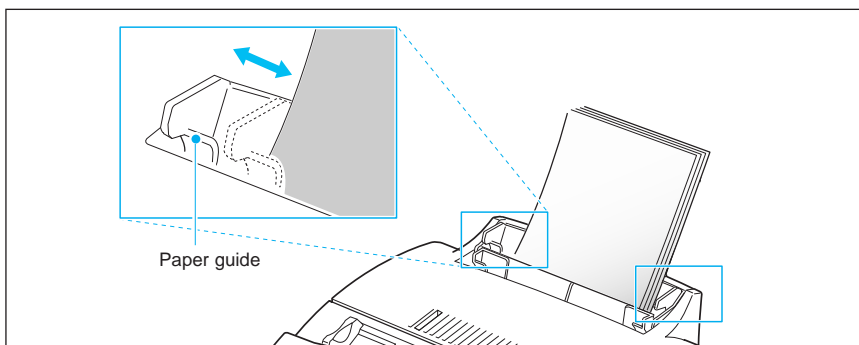


Notes:

- Do not feed stamped envelopes. The stamp is shown for placement only.
 - Never use envelopes with clasps, snaps, windows, coated linings, or self-stick adhesives. These envelopes may severely damage the machine.
 - Depending on the thickness of your envelopes, the multipurpose paper feeder can hold up to 5 envelopes. If you experience envelope feeding problems, try placing envelopes one at a time into the manual paper feeder.
- Load letterhead paper with the design facing you. The top edge of the sheet with the logo should enter the printer first.



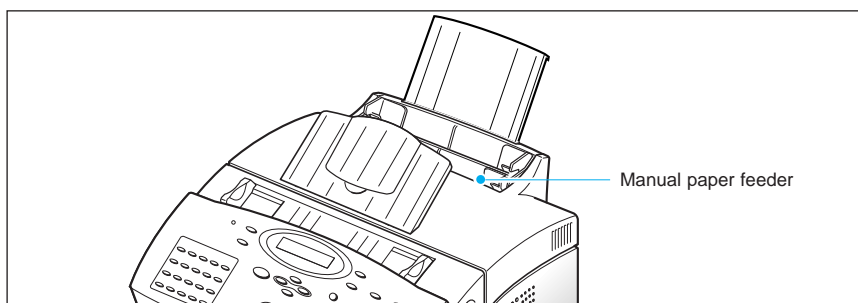
- 4. Adjust the paper guides to the width of the print material.** Slide the guides until they lightly touch the stack of print material. Do not bend the print material.



Note: If you print a job from PC, make sure that you select the correct paper size and feed source in your application before printing.

Using the Manual Feeder

Use the front manual feeder in order to feed paper one sheet at a time into your machine.

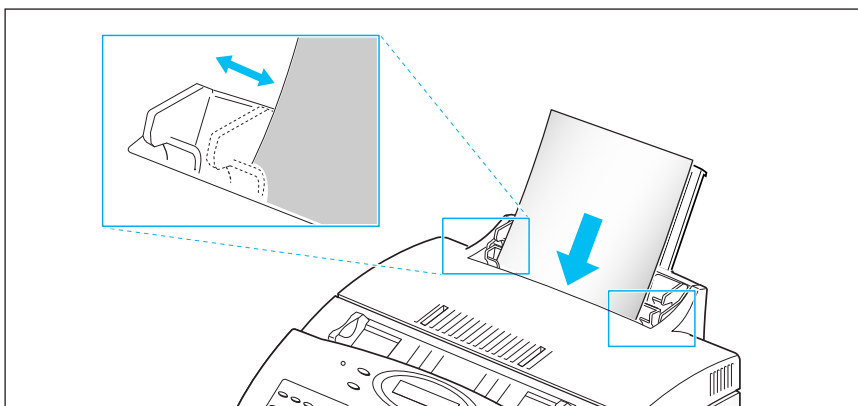


Note: When you print a file from PC, make sure that you select the manual feeding source and the correct paper size from your software application before starting your print job.

1. Place the paper in the manual feeder and adjust the paper guides to the width of the print material.

Refer to the instructions to load each type of material on page 1.13.

2. Make sure that the paper is as far down as it will go.



3. Press **Start** to start manual feeding. If you have more than one page to print, press **Start** for each page.

Paper Guidelines

When selecting or loading paper, envelopes, or other special media, keep these guidelines in mind:

- Attempting to print on damp, curled, wrinkled, or torn paper can cause paper jams and poor print quality.
- Use cut-sheet paper only. You cannot use multipart paper.
- Use only high quality, copier grade paper. Avoid paper with embossed lettering, perforations, or texture that is too smooth or too rough.
- Colored paper should be of the same high quality as white photocopy paper. The pigments must withstand the printer's fusing temperature of 392 °F (200 °C) for 0.1 second without deterioration. Do not use paper with a colored coating that was added after the paper was produced.
- Pre-printed forms must be printed with non-flammable, heat-resistant inks that do not melt, vaporize, or release hazardous emissions when subject to the printer's approximately 392 °F (200 °C) fusing temperature for 0.1 second.
- Store paper in its ream wrapper until ready to use. Place cartons on pallets or shelves, not on the floor. Do not place heavy objects on top of the paper, whether it is packaged or unpackaged. Keep it away from moisture, or other conditions that can cause it to wrinkle or curl.
- During storage, moisture-proof wrap (any plastic container or bag) should be used to prevent dust and moisture from contaminating your paper.
- Always use paper and other media that conform with those listed under 'Specifications' on page 4.5.
- When you choose envelopes, use only well-constructed envelopes with sharp, and well creased folds.
 - DO NOT use envelopes with clasps and snaps.
 - DO NOT use envelopes with windows, coated linings, self-stick adhesives, or other synthetic materials.
 - DO NOT use damaged or poorly made envelopes.

System Setup

Ringer Volume

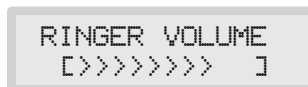
You can adjust the volume of the ringer to the desired loudness.

1. Press **Menu**, then press **System Setup** on the one-touch keypad.
The display shows 'RINGER VOLUME?.'

2. Press **Enter**, then use ▲ or ▼ to choose the desired loudness of the ringer.

The selected ringer sounds and the display shows the loudness level with > symbol. The more, the louder.

No > symbol turns the ringer off. The machine will work normally even if the ringer is set to off.



3. Press **Enter** when the desired volume level is selected. The display shows the next setup menu 'DEFAULT SETTINGS?' For details on menu, see below.

4. To return to Standby mode, press **Stop**.

Home Resolution and Home Contrast

The print resolution and contrast can be set to their most frequently used modes. Whenever a document is sent or copied, **the home contrast and resolution mode will be activated unless otherwise changed by using Resolution or Contrast button on the control panel.** See page 2.8 for details.

1. Press **Menu**, then press **System Setup** on the one-touch keypad.
The display shows 'RINGER VOLUME?.'

2. Press ▲ or ▼ until you find 'DEFAULT SETTINGS?.'

3. Press **Enter**. The display asks you to choose the home resolution mode.



```
HOME RESOLUTION  
[ STANDARD ]
```

4. Press **◀** or **▶** repeatedly until you find the desired mode:

- **STANDARD**—use with most documents.
- **FINE**—use for documents with fine detail, such as small print.
- **SUPER FINE**—use for documents that have extremely fine detail.

5. Press **Enter** when you find the mode. The display asks you to choose the home contrast mode.



```
HOME CONTRAST  
[ NORMAL ]
```

6. Press **◀** or **▶** repeatedly until you find the desired mode:

- **NORMAL**—use with documents of average or normal contrast.
- **DARKEN**—use with documents with low contrast or light images.
- **LIGHTEN**—use with documents with high contrast or dark images.
- **PHOTO**—for obtaining maximum image quality with documents that contain pictures or photographs with shades of gray.

7. Press **Enter** when you find the mode. The display shows the next setup menu 'SOUND CONTROL?.' For details on 'Sound Control' menu, see the following page.

8. To return to Standby mode, press **Stop**.

Sound Control

You can choose an alarm tone to sound when an error occurs (ALARM SOUND) or any key is pressed (KEY SOUND).

1. **Press Menu, then press System Setup on the one-touch keypad.**
The display shows 'RINGER VOLUME?.'
2. **Press ▲ or ▼ until you find 'SOUND CONTROL?.'**
3. **Press Enter.** The display prompts you to turn ON or OFF the alarm sound.
4. **Press 1 to turn the sound ON, or 2 to turn it OFF.** You can also use ◀ or ▶ button to choose 'ON' or 'OFF', then press **Enter** to confirm.
5. The display asks you to turn ON or OFF the key sound. **Press 1 to turn the sound ON, or 2 to turn it OFF.**
6. The display shows the next setup menu. **To return to Standby mode, Press Stop.**

Remote Diagnosis Protection

Remote diagnosis feature allows your machine to be checked out by service company at a remote place through phone line.

If you do not want to use the remote diagnosis feature and want to protect your machine from being open by an unauthorized person, you can enable this remote diagnosis protection feature.

1. **Press Menu, then press System Setup on the one-touch keypad.**
The display shows 'RINGER VOLUME?.'
2. **Press ▲ or ▼ until you find 'REMOTE DIAGNOSIS PROTECTION?,' then press Enter.**
3. The display asks you to turn the feature ON or OFF. **Press 1 to turn it ON, or 2 to turn it OFF.**
4. The display shows the next setup menu. **To return to Standby mode, Press Stop.**

Select Language

You can select the LCD display language between English, French.

1. Press **Menu**, then press **System Setup** on the one-touch keypad. The display shows 'RINGER VOLUME?.'
2. Press **▲** or **▼** until you find 'SELECT LANGUAGE?', then press **Enter**.
3. Press **▲** or **▼** to choose the desired display language, then press **Enter**. You can also press the number of the language in the display.
4. The display shows the next setup menu. **To return to Standby mode, Press Stop.**

Econo Mode Setting

To get the most from your toner supply, set the Econo mode to On. If set to On, you can preserve the toner supply. The print quality may be reduced.

1. Press **Menu**, then press **System Setup** on the one-touch keypad. The display shows 'RINGER VOLUME?.'
2. Press **▲** or **▼** until you find 'ECONO MODE SETTING?', then press **Enter**.
3. The display asks you to set the mode to ON or OFF. Press **1** to set ON, or **2** to set OFF.
4. The display shows the next setup menu. **To return to Standby mode, Press Stop.**

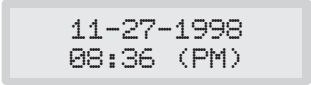
Adjusting Speaker Volume

1. Press **OHD** to adjust the speaker volume. If you cannot hear dial tone, check the phone line connection.
2. Press **▲** or **▼** repeatedly until you find the desired loudness (1~7). The display shows the current volume level.
3. After choosing the desired volume level, press **OHD**.

Setting the Date and Time

The current date and time are shown in the display when the machine is on and ready for use (Standby mode). The date and time are printed on all faxes you send.

1. Press **Menu**, then press **Date & Time** on the one-touch keypad. The display shows the currently set date and time.



11-27-1998
08:36 (PM)

e.g. 12 HOURS format



11-27-1998
20:36

e.g. 24 HOURS format

2. Enter the correct date and time using the number keypad.

DD (Day)	= 01~31
MM (Month)	= 01~12
YY (Year)	= four digits (1990~2089)
HH (Hour)	= 00~23 (24 HOURS format)
	= 01~12 (12 HOURS format)
MM (Minute)	= 00~59
AM (Ante Meridiem)	
PM (Post Meridiem)	

3. Press **Enter when the date and time in the display is correct.**

If you enter an invalid number, the machine beeps and doesn't proceed to the next step. If this happens, just reenter the correct number.

The display shows the date and time you have set, then returns to Standby mode.

Setting the System ID (Your Number and Name)

The System ID will be printed at the top of each page sent from your machine.

1. Press Menu, then press System ID on the one-touch keypad.

The display asks you to enter the telephone number.

If there is a number previously registered, the number appears.

2. Enter the telephone number (up to 20 digits) which your machine is connected to. You can include + and - symbol by pressing * and # respectively.

If you make a mistake, press ◀ or ▶ to move the cursor under the wrong digit, then enter the correct number to change or press **Delete** to delete the number.

3. Press Enter when the number in the display is correct. The display asks you to enter your ID name.

4. Enter your ID name (up to 20 characters).

You can enter alphanumeric characters using the number keypad, and include special symbols by pressing 0 repeatedly.

For details on how to use the number keypad to enter alphanumeric characters, see page 2.4.

If you want to enter the same letter or number in succession (e.g. SS, AA, 777), enter one digit, then move the cursor by pressing ▶, and enter the next digit.

If you want to insert a space in the name, you can also use ▶ button to move the cursor to skip the position.

5. Press Enter when the name in the display is correct.

***Note:** If there is a number and name previously registered, the number and name appears in the upper line and 'ED:1 DEL:2 NXT:3' in the bottom line.*

*Press **1** to edit the existing number. Press **2** to delete the number. The machine deletes the number and continues next step. Press **3** to keep the number and continue.*



Operation

Using the Control Panel

LCD Display

The display shows the current status of your machine and guides you through various tasks using a menu system for each of operation.

On/Off Line and Lamp

Turn your machine On-line or Off-line. The lamp lights while the machine is on-line, indicating the machine is ready for printing a PC file.

Print Priority

Use to give print priority to PC file while the machine prints a received fax.

One-Touch Dial and Special Function Buttons

Use to call most frequently used numbers with one button. Also, use these buttons with **Menu** button to set up special functions or print lists.

▲ and ▼

Use to display the next or last menu item. Also, use to adjust audible volume.

Menu

Use to choose special functions.

◀ and ▶

Use to move cursor left or right through the display.

Stop

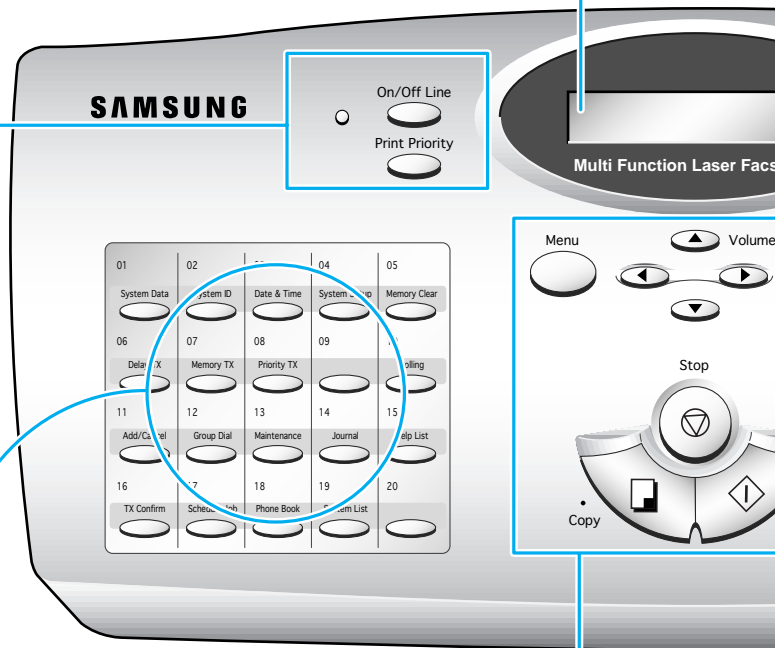
Use to stop an operation at any time.

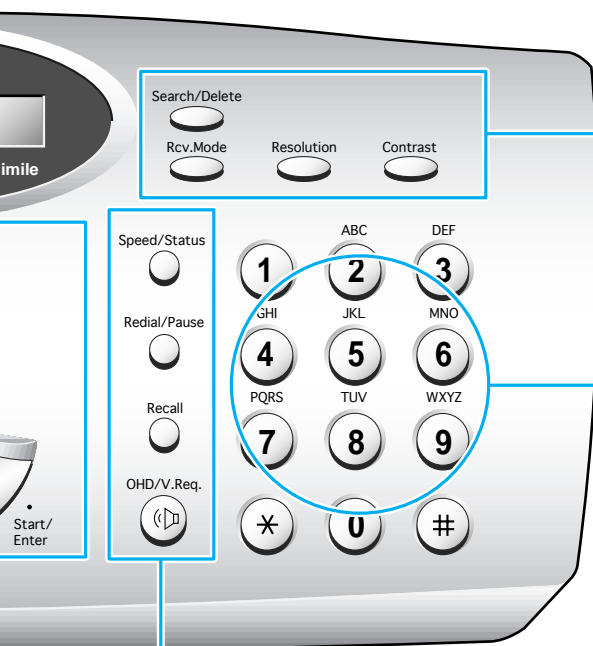
Copy

Use to copy a document.

Start/Enter

Use to start a job. Also use to activate the selection shown in the display.



**Search/Delete**

Use to search for numbers in memory.
Or use to delete digits in the edit mode.

Rcv.Mode (*Receive Mode*)

Use to choose the receive mode you want to use. See page xx. The selected mode is displayed.

Resolution

Use to choose the resolution of transmitted documents.

Contrast

Use to choose the contrast of copied or transmitted documents.

Number Keypad

Use to dial numbers manually or to enter letters.

Speed/Status

Use to dial calls and send fax documents by entering a 2-digit number.
Also use to switch the LCD while performing dual jobs.

Redial/Pause

Use to redial the last phone number called. You can also use it to add a pause when storing a number in memory.

Flash

Use to perform a switch-hook operation such as call waiting.

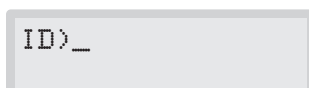
OHD (*On-Hook Dial*) / **V.Req** (*Voice Request*)

Use to dial numbers without picking up the handset. Also use it to make a voice call after sending or receiving a fax.

Using the Number Keypad

As you perform various tasks, you will need to enter names and numbers. For example, when you set up your machine you enter your name (or your company's name) and telephone number. When you use the one-touch dial or speed dial, you also enter the telephone numbers and names.

When the display asks you to enter a name, the LCD display reads:



You can then use the procedures described below to enter up to 20 letters and special characters, numerals, or spaces.

Entering Alphanumeric Characters

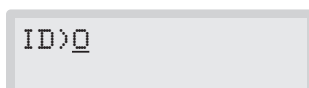
You can include special characters (space, plus sign, etc.) in the name by using **0** key. See 'KEYPAD CHARACTER ASSIGNMENTS' on page 2.5.

1. **Locate the button labeled with the letter you want – then press the button repeatedly until the correct letter appears in the display.**



For example, to enter an O, press **6** (labeled MNO). Each time you press **6** the display shows a different letter—first M, then N, and O, and finally 6.

The letter appears in the display.



2. When the letter you want appears in the display, press another number key labeled with the next letter you want.

If the next letter is printed on the same number button, move the cursor by pressing **▶**, then press the button.

The blinking cursor moves right and the next letter appears in the display.



ID>OP

3. Select additional letters in the same way. When you're finished entering letters, press **Enter**.

KEYPAD CHARACTER ASSIGNMENTS

Key	Assigned numbers, letters, or characters
1	1
2	A → B → C → 2
3	D → E → F → 3
4	G → H → I → 4
5	J → K → L → 5
6	M → N → O → 6
7	P → Q → R → S → 7
8	T → U → V → 8
9	W → X → Y → Z → 9
0	Space → , → . → / → + → * → & → 0

Entering Numbers

You can enter the number of the remote fax machine manually by using the number keypad. The number you pressed appears in the display.



TEL>95551212_

When the display asks you to enter a number, you can also use a one-touch dial button (including Group dial) and 2-digit speed dial number.

Your machine lets you send the same document to more than one location. When you enter a fax number, if the display reads 'ANOTHER FAX NUMBER?' you are allowed to enter another fax number. To enter ANOTHER FAX NUMBER, you can enter the number manually, or use one-touch or 2-digit speed dial number. Note that you can not use Group dial button for ANOTHER FAX NUMBER.

Editing Numbers or Name

If you make a mistake while entering a number or name, move the cursor under the wrong digit by using ◀ or ▶. Then press the correct number to change, or press **Delete** to delete the number.

Inserting Pause

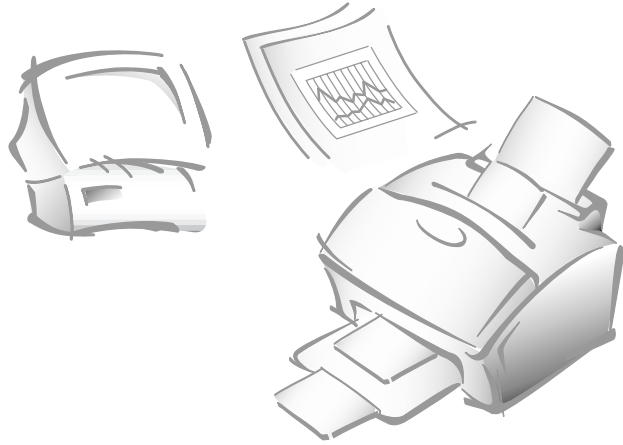
With some private telephone systems, you must dial an access code (9, for example) and listen for a second dial tone before dialing an outside number. In such cases, you must insert a pause in the number. Insert a pause in a number when you are setting up a one-touch or speed dial number, or when you dial a number without lifting the handset.

To insert a pause, press **Pause** while entering the number.

When you dial a number, the dialing process pauses for about 3 seconds at the point where you pressed **Pause**.

If you require a longer pause time, press **Pause** twice.

Sending a Fax



Preparing Documents for Faxing or Copying

You can use the machine to fax, or copy documents that are printed on standard letter, legal, or A4 size paper. Follow these guidelines to prepare your documents.

- Do not attempt to feed the following types of documents into the machine. Instead, make copies and insert the copies into the document tray.
 - wrinkled or creased paper
 - curled or rolled paper
 - torn paper
 - carbon-paper or carbon-backed paper
 - coated paper
 - onion skin or thin paper
- Remove all staples, paper clips, and the like before feeding the document.
- Make sure any glue, ink, or correction fluid on the paper is completely dry before feeding the document.
- Do not feed documents with pages that are different sizes or of different thicknesses.

Setting Document Resolution and Contrast

We recommend sending documents printed using a typewriter, felt tip pen, black ink, or laserwriter. The paper should be white or very light, and of normal weight-not cardboard. Blue lines on a ruled pad don't fax well.

When you send normal documents, you need not adjust the resolution and the contrast.

If you send documents with unusual contrast characteristics, including photographs, you can adjust the resolution and contrast to send a high-quality transmission of the documents.

Resolution

Press **Resolution** button to increase sharpness and clarity. By pressing **Resolution** button repeatedly after loading a document, you can choose between **STANDARD**, **FINE**, or **SUPER FINE** mode.

STANDARD works well for documents with normal sized characters.

FINE is good for documents containing small characters or thin lines, or print from a dot-matrix printer.

SUPER FINE works well for documents containing extremely fine detail. **SUPER FINE** works only if the remote machine also has the **SUPER FINE** feature.

Contrast

Press **Contrast** button to compensate for the brightness or darkness of your faxed document. By pressing **Contrast** button repeatedly after loading a document, you can choose between **NORMAL**, **DARKEN**, **LIGHTEN**, or **PHOTO**.

NORMAL works well for normal documents.

DARKEN works with light print or faint pencil markings.

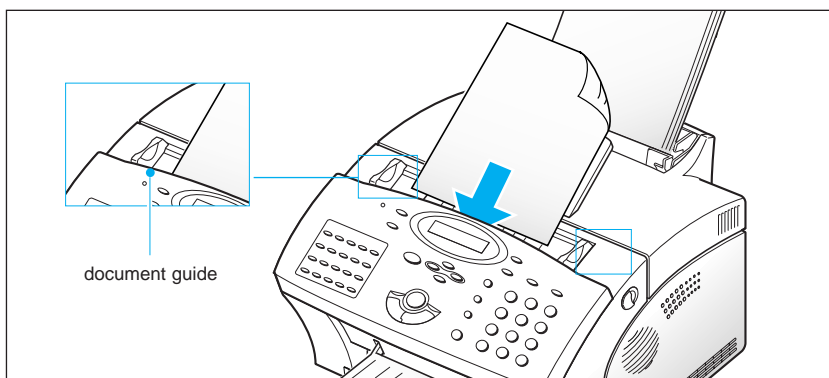
LIGHTEN works with dark print.

PHOTO is used when faxing photographs or other documents containing color or shades of gray. Although your machine won't transmit color, it will print and send up to 64 shades of gray.

Note: You can set the default resolution and contrast. The default mode will be effective when a document is sent or copied unless you change the setting for individual operation. Once the current operation is completed, the setting will revert to their preset defaults for the next operation. For details on how to set the default resolution and contrast, see page 1.16.

Loading Document

1. Turn the page face down.
2. Adjust the document guides to match the width of the document.
3. Slide the sheet down into the document tray until it's gripped by the machine.



The automatic document feeder seizes and pulls in the page. The display shows 'DOCUMENT READY' and the remaining memory capacity alternatively.

You can insert up to 30 sheets (75 g/m² Paper) at a time. If you insert more than one sheet, make sure the bottom sheet enters first. Stagger the leading edge of the sheets slightly, and insert the sheets with a slight push to ensure smooth feeding.

To add pages while the fax is sending, insert them into the loading slot on top of the already loaded sheets.

4. If necessary, use the **Resolution** button to change the resolution and the **Contrast** button to change the contrast (see page 2.8).

Sending a Fax Automatically

1. After loading a document, enter the number of the remote fax machine using the number keypad.

You can store one-touch or speed dial numbers so that you can dial your most frequently used numbers with one touch of a button or 2-digit speed dial number. For information on storing and using numbers in memory, see page 2.27.

If you make a mistake while entering a number, move the cursor under the wrong digit by using ◀ or ▶, and correct the number or press **Delete** to delete the number.

2. Press **Start** when the number appears correctly in the display. The machine dials the number and begins to transmit.

Canceling Transmission

Press **Stop** any time during transmission. The machine continues to send the fax and the display shows a message warning you that the machine is in use. Press **Stop** again.

Confirming Transmission

When the last page of your document has been sent successfully, the machine beeps and returns to Standby mode.

If something went wrong during your fax transmission, an error message appears in the display. For a listing of error messages and their meanings, see page 3.6.

If you receive an error message, press **Stop** to clear the message and try to send the document again.

You can set your machine to print out a confirmation report automatically each time sending is completed. For more information, see 'User Options' on page 2.40.

Automatic Redial

When you send a fax, if the number you have dialed is busy or there is no answer, the machine hangs up, waits for the specified retry term and redials the number. If after the specified number of retry attempts (retry count), the machine fails to connect, the machine returns to Standby mode.

While the machine is redialing, the display shows 'RETRY REDIAL?.' If you want to redial the number immediately, press **Start**. To stop redialing, press **Stop**.

You can select the number of retries and the retry term between each redial attempt.

Voice Request

If you're sending or receiving a document and need to speak to the other person during the same phone call, use Voice Request to alert the person at the remote site. You can also respond to a Voice Request made by the person at the remote end.

Sending a Voice Request

1. Press **V.Reg** while a document is being sent or received. Voice Request signal is stored and then sent to the remote fax machine after the document has been sent or received.
2. When the phone rings, pick up the handset and answer it.

You can cancel a Voice Request by pressing **V.Reg** again while you are sending or receiving a document.

Answering a Voice Request

When the phone rings after sending or receiving a fax, pick up the handset and answer it.

If you don't answer the Voice Request, the machine prints out the number that made the Voice Request, and the time and date the request was made.

*Note: If your machine is not equipped with handset, you should pick up the handset of the extension phone connected to EXT.LINE jack, then press **Stop**.*

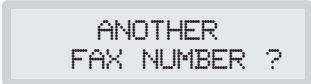
Delayed Transmission

You can set your machine to send a fax at a later time when you will not be present. A maximum of 30 transmission jobs can be reserved in your machine.

1. Load the document face down. If necessary, adjust **Resolution**, or **Contrast**. For details, see page 2.8.
2. Press **Menu**, then press **Delay TX** on the one-touch keypad.
3. Enter the number of the remote machine, then press **Enter**.

To enter the number, you can also press a one-touch button including Group dial button. Otherwise, press **Speed/Status**, enter a 2-digit speed dial number, then press **Enter**. The stored number (and name) appears in the display. Press **Enter** to confirm the number.

- The display asks you to enter another fax number to send the document to another location.



```
ANOTHER
FAX NUMBER ?
```

- If you want to send to more than one location, press **Enter** and enter another fax number using the number keypad, one-touch dial, or 2-digit speed dial number. Note that you cannot use Group dial number for another fax number.

The number appears in the display. Press **Enter** to confirm the number.

Or

To send to one location or when you complete the last fax number setting, press **Stop**.

- The display asks you to enter a name. If you want to assign a name to the transmission, enter the name. If not, skip over this step.

For details on how to enter letters using the number keypad, see page 2.4.

- Press **Enter**. The display shows the current time on the upper line and asks you to enter the time in the bottom line when the fax is to be sent.



```
CURRENT [12:30]
START [12:30]
```

- Enter the time by using the number keypad, then press **Enter**.

Enter the time in 24-hour format or 12-hour format. For example, enter 2230 for 10:30 P.M. If you set a time earlier than the current time, the document will be sent at that time on the following day.

- The machine returns to Standby mode and the display shows a reminder that a Delayed Transmission is set.

Note: If you want to cancel the Delayed Transmission, see 'Canceling a Standby Operation' on page 2.16.

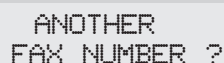
Memory Transmission (Broadcasting)

With Memory Transmission, documents are automatically stored in memory and sent to a remote station. Use this feature to send your documents to multiple locations. After sending, the documents are automatically erased from memory.

1. **Load the document face down.** If necessary, adjust **Resolution**, or **Contrast**. For details, see page 2.8.
2. Press **Menu**, then press **Memory TX** on the one-touch keypad.
3. **Enter the number of the remote machine, then press Enter.**

To enter the number, you can also press a one-touch button including group dial button. Otherwise, press **Speed/Status**, enter a 2-digit speed dial number, then press **Enter**. The stored number (and name) appears in the display. Press **Enter** to confirm the number.

4. The display asks you to enter another fax number to send the document to another location.



ANOTHER
FAX NUMBER ?

Note: The machine displays the 'ANOTHER FAX NUMBER?' message repeatedly, each time you enter a fax number using manual dialing, One-Touch, 2-digit Speed Dialing, or Group Dialing. If you already used a group number at step 3, you cannot use another group number any more. You can use only one group number at this transmission job.

If you have used this multi-address transmission feature in other operation(s) currently registered in memory, the machine does not display 'ANOTHER FAX NUMBER?'.

5. **If you want to send to more than one location, press Enter and enter another fax number using the number keypad, one-touch dial, or 2-digit speed dial number.** Note that you cannot use Group dial number for another fax number.

The number appears in the display. **Press Enter to confirm the number.**

Or

To send to one location or when you complete the last fax number setting, press Stop.

6. The document will be scanned into memory before transmission. The display shows the memory capacity and the number of pages, then the machine begins sending the document.

Priority Transmission

When priority transmission is enabled, a high priority document can be transmitted ahead of reserved operations. The document is scanned into memory, then transmitted when the current operation concludes. In addition, a priority transmission will interrupt a broadcast operation between stations (i.e., when transmission to station A ends, before transmission to station B begins) or between redial attempts.

1. **Load the document face down.** If necessary, adjust **Resolution**, or **Contrast**. For details, see page 2.8.
2. Press **Menu**, then press **Priority TX** on the one-touch keypad.
3. **Enter the number of the remote machine, then press Enter.**

To enter the number you can also press a one-touch button. Otherwise, press **Speed/Status**, enter a 2-digit speed dial number, then press **Enter**. The stored number (and name) appears in the display. Press **Enter** to confirm the number. Note that you can not use Group dial number.

4. The display asks you to enter a name. **If you want to assign a name to the transmission, enter the name. If not, skip over this step.**

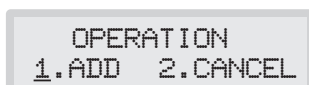
For details on how to enter letters using the number keypad, see page 2.4.

5. **Press Enter.** The display shows the number being dialed, then the machine begins sending the document.

Adding Documents To a Standby Operation

You can add documents to the delayed transmission previously reserved in your machine's memory.

1. **Load the document face down.** If necessary, adjust **Resolution**, or **Contrast**. For details, see page 2.8.
2. **Press Menu, then press Add/Cancel on the one-touch keypad.**
The display asks you to select 'ADD' or 'CANCEL'.



```
OPERATION
1.ADD 2.CANCEL
```

3. **Press Enter to confirm 'ADD'.** The display shows operation currently reserved in memory.

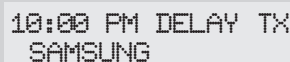
24-hour format



```
22:00 DELAY TX
SAMSUNG
```

(e.g. Delay transmission is scheduled to be sent at 10:00 PM.)

12-hour format



```
10:00 PM DELAY TX
SAMSUNG
```

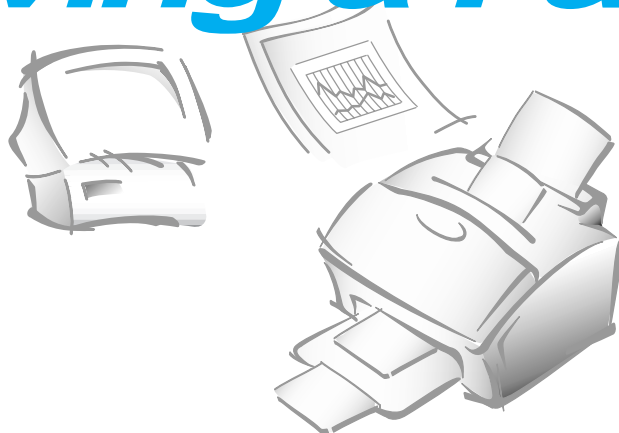
4. **Press ▼ or ▲ repeatedly until you find operation you want to add documents, then press Enter.**

The machine automatically stores the documents in memory, and displays the number of total pages and added pages, then returns to Standby mode.

Canceling a Standby Operation

1. **Press Menu, then press Add/Cancel on the one-touch keypad.** The display asks you to select 'ADD' or 'CANCEL'.
2. **Press 2 to choose 'CANCEL'.** The display shows operation currently reserved in memory.
3. **Press ▼ or ▲ repeatedly until you find the operation you want to cancel, then press Enter when you find the operation.**

Receiving a Fax

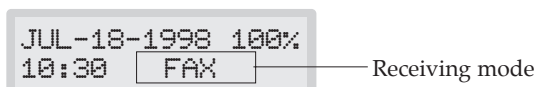


Receiving a Fax

Your multi-function machine has four reception modes:

- In **FAX** mode, the machine answers an incoming call and immediately goes into receive mode, waiting for a fax to be sent.
- In **TEL/FAX** mode, the machine answers an incoming call expecting to receive a fax. If the machine does not sense a fax signal, it will continue to sound the ringing tone to tell you it is a phone call. If you do not lift the handset during the ringing, the machine will switch to automatic fax reception mode.
- In **ANS/FAX** mode, the answering machine answers an incoming call, and the caller can leave a message on the answering machine. If the fax machine senses a fax tone on the line, the call automatically switches over to the fax machine. To use the ANS/FAX mode, you have to attach an answering machine to the EXT socket on your fax machine (see page 1.8).
- In **TEL** mode, automatic fax reception is turned off. You can receive a fax only by manually picking up the handset and pressing **Start**.

The current reception mode is displayed in the bottom line of the display window when the machine is in Standby mode.



If you seldom use the fax line for voice conversations, set the fax machine to receive a fax automatically by selecting either FAX mode or TEL/FAX mode.

***Note:** While you print a PC file with this machine, an incoming fax will be received and stored in memory. If you have a lot of pages to print, we recommend stopping PC printing to prevent memory from becoming full.*

Receiving Automatically in FAX Mode

1. Press **Rcv.Mode** until the display shows 'FAX.'
2. When you get a call, the machine answers the call on the default ring and receives a fax automatically. You can change the number of rings.

To adjust ringer volume, press **Menu, System Setup** on the one-touch keypad, **Enter** to access the ringer volume mode, then use **▲** or **▼** to choose the desired loudness.

Receiving Automatically in TEL/FAX Mode

1. Press **Rcv.Mode** until the display shows 'TEL/FAX.'
2. When you get a call, the machine answers the call on the default ring and receives a fax signal automatically. You can change the number of rings.

If the machine does not sense a fax signal, your machine will give another ringing tone to tell you it is a phone call.
3. **Lift the extension phone to answer the call.** If you do not pick up the extension phone within a specified time, the machine will switch to automatic fax reception mode.

***Note:** If your machine is not equipped with handset, you'll pick up the handset of the extension phone connected to EXT.LINE jack. In the case, pick up the handset, then press **Stop**.*

Receiving Manually in TEL Mode

1. Press **Rcv.Mode** until the display shows 'TEL.'
2. When the telephone rings, pick up the handset and answer it.
3. If you hear a fax tone, or if the person on the other end asks you to receive a document, press **Start** on the machine.

Or, press the buttons ' * 9 * ' (star-nine-star) on the extension telephone.

' * 9 * ' is the remote receive start code preset at the factory. The first and the last asterisks are fixed, but you can change the middle character to whatever you choose. For more information, see page 2.37.

4. **Replace the handset.** The machine begins receiving and returns to Standby mode when reception is complete.

Note: If your machine is not equipped with handset, you'll pick up the handset of the extension phone connected to EXT.LINE jack.

Receiving Automatically in ANS/FAX Mode

To use this mode, you must attach an answering machine to the EXT.LINE jack on the back of your machine (see page 1.8).

1. Press **Rcv.Mode** until the display shows 'ANS/FAX.'
2. When you get a call, the answering machine answers it. If the caller leaves a message, the answering machine stores the message normally.
If your machine hears a fax tone on the line, the fax receive mode is activated.

Notes:

- If you have set your machine to ANS/FAX mode and your answering machine is switched off, or no answering machine is connected to the machine, the machine will automatically go into fax receive mode after several rings.
- If your answering machine has a 'user-selectable ring counter', set the machine to answer incoming calls within 4 ring.
- If you are in TEL mode (manual reception) when the answering machine is connected to your machine, you must switch off the answering machine, or the outgoing message from the answering machine will interrupt your phone conversation.

If Your Machine is Out of Paper When it Receives a Fax - Receiving into Memory

If your machine is set to receive a fax automatically and the recording paper has run out, a paper jam has occurred, or you are making a copy or printing a list, the incoming documents are automatically stored in the fax machine's memory. After receiving documents, the machine displays 'MEMORY RECEIVED' and the cause, 'NO PAPER', for example.

You must clear the problem by loading new paper or clearing the jam. Then your machine will automatically print the fax stored in memory.

If you clear the problem while the machine is receiving documents into memory, it will print the stored document immediately after you clear the problem.

Distinctive Ring Pattern Detection (DRPD)

"Distinctive Ring" is a telephone company service which enables a user to use a single telephone line to answer several different telephone numbers. The particular number someone uses to call you on is identified by a distinctive ringing pattern consisting of various combinations of long and short ringing sounds. This feature is often used by answering services who answer telephones for many different clients and need to know which number someone is calling in on to properly answer the phone.

Using the *Distinctive Ring Pattern Detection* feature (DRPD), this machine can "learn" the ring pattern you designate to be answered by the fax machine. Unless you change it, this ringing pattern will continue to be recognized and answered as a fax call, and all other ringing patterns will be forwarded to the telephone or answering machine plugged into the EXT.LINE jack. You can easily suspend or change *Distinctive Ring Pattern Detection* at any time.

With the DRPD feature active, 'DRPD' appears in the display and the previously set reception mode is ignored. If you turn DRPD off, the machine returns to any previously set reception mode.

Polling

What is Polling?

Polling is used when one fax machine requests another to send a document. This is useful when the person with the original document to be sent is not in the office. The person who wants to receive the document calls the machine holding the original and requests that the document be sent. In other words, it “polls” the machine holding the original.

Being Polled By a Remote Machine

You can program your fax machine to send documents in your absence when polled by a remote fax machine. It is possible to use a Poll code to prevent unauthorized polling of your fax machine. When you secure your machine in this manner, only those who know the Poll code can poll your machine.

1. **Load the document face down.** If necessary, use **Resolution**, or **Contrast**. For details, see page 2.8.
2. **Press Menu, then press Polling on the one-touch keypad.** The display prompts that you can choose the two polling options; TX POLL and DELAY RX POLL.
3. **Press Enter to confirm ‘1.TX POLL.’** The display asks you to enter a 4-digit poll code. The poll code is preset to 0000 at the factory, which represents no Poll code.



```
TX-POLL CODE  
[0000]
```

4. **If you want to use a Poll code, enter the 4-digit code (except for 0000), then press Enter.**
Or
If you do not want to secure the transmission with a Poll code, press Enter when the display shows 0000 for TX-POLL CODE, or press 0000.
5. The display asks you to store the document in the machine’s bulletin memory.

If you store the document in the bulletin board memory, more than one remote station can poll that document from your machine. If not, the file will be automatically erased after being polled by a remote machine.

To store the document in the bulletin board memory, press Enter.
Or
If you do not want to store in the memory, press Stop.

6. The machine stores the document in memory. The display counts the number of pages being stored in memory and the memory capacity remaining.

The machine returns to Standby mode and the display shows a reminder that a Polling Transmission is set. The machine automatically switches to FAX mode (automatic receiving) when set to be polled.

Adding Documents To the Job to be polled

If you want to add documents to the original documents waiting in memory to be polled, load the additional documents face down into the feeder and then follow the procedure below.

1. **Press Menu, then press Polling, on the one-touch keypad.** The LCD displays the polling options.
2. **Press 1 to select '1.TX POLL'.** The display asks you to enter the Poll code.



TX-POLL CODE
[0000]

The last used Poll code is displayed. Poll code '0000' represents no code.

3. **Enter the 4-digit Poll code you have previously set, then press Enter.** The display asks you to select 'ADD' or 'CANCEL.'



TX POLL
1.ADD 2.CANCEL

4. **To add documents to the previously stored documents, press 1.** The machine stores the document in memory and returns to Standby mode.

If you want to cancel the adding job and return to Standby mode, press **2**. The display asks you to confirm it. Press **1**.

Polling One or More Remote Machines

You can set your machine up to automatically receive documents from one or more unattended remote fax machines now, or at a later time. This feature permits unattended polling in the evening hours when telephone rates are lower.

Note: The remote machine must be ready for polling.

1. Press **Menu**, then press **Polling** on the one-touch keypad. The display shows the polling options.
2. Press **2** to select 'DELAY RX POLL.' The display asks you to enter the number of the remote fax machine.
3. Enter the number of the remote fax machine, then press **Enter**.

You can press a one-touch button including Group dial button. Otherwise, press **Speed/Status**, enter a 2-digit speed dial number, then press **Enter**. The stored number (and name) appears in the display. You can use only one Group number at the polling job. Press **Enter** when the number appears correctly in the display.

4. The display asks you to enter another fax number to receive documents from another location.

To poll more than one location, press **Enter** and repeat steps 3-4.

Or

To poll one location or when you enter all locations, press **Stop**.

Note: The ANOTHER FAX NUMBER? prompt does not appear if any broadcasting currently set up in your fax machine has not executed.

One operation can be set to call up to 10 other fax numbers in a single operation.

5. The display asks you to enter a name for the job. To assign a name to the polling job, enter the name. If not, skip over this step.

6. Press **Enter** when the name appears correctly or without entering a name. The display asks you to enter a 4-digit code. Poll code '0000' represents no code.

If the remote machine is secured with a Poll code, you must enter the correct code, and press **Enter**.

Or

If the remote machine is not secured with a Poll code, press **Enter** to accept [0000] which represents no code, or press 0000.

7. The display asks you to enter the time when your machine calls the remote machine. **Enter the time in 24-hour format or 12-hour format.** For example, enter 2030 for 08:30 P.M. If you set a time earlier than the current time, your machine call the number at that time on the following day.

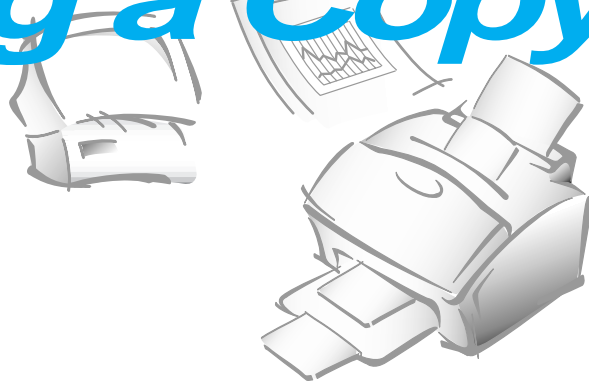
Or

To call the remote machine immediately, skip over this step.

8. Press **Enter** when the time appears correctly in the display or without entering the time. If you have entered a specific start time, the machine will dial, and receive a document from the remote machine at the time.

If not, the machine dials the remote machine immediately.

Making a Copy



Making a Copy

The resolution is automatically set to S.FINE while the copy feature is in use, however, the contrast can be changed to produce the best copy quality for the particular document containing faint markings, dark image, photographs, or other halftone images.

When you make a copy, your machine provides several option features you can choose as follows:

- Multiple copies** : 1 to 99 copies of the document can be made.
- Copy rate** : You can reduce or expand the image size by 1% increments from 50% to 200%.
- Collation** : When COPY COLLATE menu is set to ON, the machine sorts the print job. For example, if you copy a three-page job to print 2 copies, the machine prints page3, page2, page3, page2, page1.

To make a direct single copy without setting any option:

1. **Load a document with the print side facing down.** If necessary, adjust **Contrast** button to change the contrast. For details on the Contrast, see page 2.8.
2. **Press Copy twice or press Copy then Enter.** The machine starts copying.

To set copy options:

1. Load a document with the print side facing down. If necessary, adjust **Contrast** button to change the contrast. For details on the Contrast, see page 2.8.
2. Press **Copy**. The display asks you to enter the number of copies (1 to 99).

```
COPY
[01-99] <01>
```

4. If you need two or more copies, enter the desired number using the dial keypad, then press **▼**. You can also press **▼** without setting the number of copies. The display shows the next option; copy rate menu.

```
REDUCE/ENLARGE
1:AUTO 2:MANUAL
```

5. If you want to reduce or expand the image size, press **2**, enter the number of the desired copy rate, then press **▼**. Go to step 7.

```
ENTER RATE
[50-200] <100>
```

If not, press **1**.

6. The display asks you to choose how to collate. There are two ways to collate multiple copies; OFF and ON.

```
[COPY COLLATE]
1:ON 2:OFF
```

The 'OFF' is the stacking method. This will make 'n' copies of page one, 'n' copies of page two, and so on. These will all be stacked on top of each other. The second method 'ON' is the sorting method. This will make 1 copy of page 1, 2, 3, 4, in order, then makes a second copy of 1, 2, 3, 4 until a total of 'n' copies has been made.

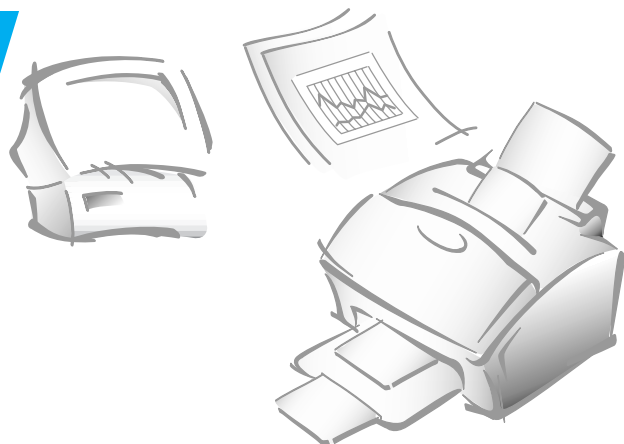


Press **1** or **2** to choose the desired collation method. You can also press **▼** without setting the collation. The LCD display scrolls back and shows the first option; number of copies.

7. Press **Copy** to begin the copy operation.

*Note: When you set the copy options, pressing **Copy** anytime begins the copy operation immediately without displaying the remaining options.*

Automatic Dialing



One-Touch Dialing

One-Touch dialing lets you use any one of the 20 One-touch buttons located on the left of the machine's control panel to automatically dial a number.

Storing a Number for One-Touch Dialing

1. **Press and hold the one-touch button (01 through 20) for 2 seconds that you want to assign.** The display shows `Txx:`, where `xx` represents the selected one-touch button.
2. **Enter the number up to 46 digits you want to store by using the number keypad, then press **Enter**.**

To insert a pause between numbers, press **Redial/Pause**; a '-' (hyphen) symbol appears in the display.

If you make a mistake while entering a number, use ◀ or ▶ to move the cursor under the wrong digit, then enter the correct digit, or press **Delete**.

3. The display asks you to enter a name. **Enter the desired name (up to 20 digits).** For information on how to enter names, see page 2.4.

Or

If you don't want to assign a name, skip this step.

If you assign a name to the number, the name appears in the display when you press the one-touch button.

4. Press **Enter** when the name appears correctly or without entering a name.
5. To set another one-touch number, press the desired one-touch button and repeat steps 2 through 5.

Or

To return to Standby mode, press **Stop**.

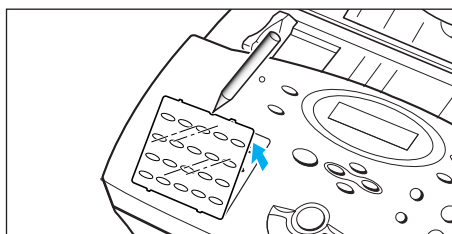
Sending a Fax Using a One-Touch Number

1. Load a document you want to send a fax.
2. Press the one-touch button (01 through 20) to which you stored a number. The number will be automatically dialed, then the document begins to transmit when the remote fax machine answers the phone.

Using Address Label

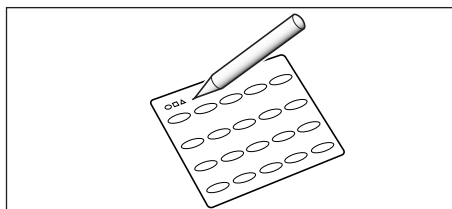
A One-touch label sheet is included with your machine. As you store numbers in one-touch dial buttons, make a note of the numbers on the label to remind you which number is stored in each position.

1. Remove the clear cover and label using an instrument with a pointed end, as shown at right.



2. Write information on the label and replace the label and cover.

You may want to use pencil in case you wish to change these numbers later.



Speed Dialing

Msys 5200 :

You can store up to 80 numbers in 2-digit Speed Dial locations (01-80).

Msys 5150 :

You can store up to 50 numbers in 2-digit Speed Dial locations (01-50).

Storing a Number for Speed Dialing

1. Press and hold **Speed/Status** for 2 seconds.
2. Enter a 2-digit location number to which you want to store a number, then press **Enter**.

If a number is already stored in the location you chose, the display shows the number in the upper line and `ED:1 DEL:2 NXT:3' in the bottom line. Press **1** to edit that number, **2** to delete that number, or **3** to keep that number and choose another location.

3. Enter the number you want to store, then press **Enter**.
4. To assign a name to the number, enter the desired name. For information on how to enter names, see page 2.4.
Or
If you don't want to assign a name, skip this step.
5. Press **Enter** when the name appears correctly or without entering a name.
6. To store more telephone numbers, repeat steps 2 through 5.
Or
To return to Standby mode, press **Stop**.

Sending a Fax Using a Speed Number

1. Load a document you want to send a fax.
2. Press **Speed/Status**, then enter a 2-digit speed dial location number.
3. Press **Start to dial the number**. The number will be automatically dialed, then the document begins to be transmitted when the remote fax machine answers the phone.

Group Dialing (for Multi-Address Transmission)

Numerous one-touch and speed dial numbers can be registered as a Group. By using the Group number, you can send a document to multiple parties in a single operation. Your machine will dial the remote numbers in stored sequence. If the number is busy, your machine will dial the next stored number and after dialing all of the stored numbers, will automatically redial any number previously busy. Before you can use this feature, you must coordinate and store the Group numbers desired.

Storing One-Touch or Speed Dial Numbers for Group Dialing

1. Press **Menu**, then press **Group Dial** on the one-touch keypad.
2. Enter a 2-digit location number you want to use for group dial, then press **Enter**.

The display asks you to press a one-touch button or enter a speed dial number you wish to include in the group.



```
ENTER ONE-TOUCH  
/ SPEED DIAL> ##
```

3. Press a one-touch button to which the fax number you wish to include in the group is stored.
Or
Enter a 2-digit speed dial location to which the fax number you wish to include in the group is stored.
4. Press **Enter**. Repeat steps 3 and 4 to enter more destination numbers into the selected group.
5. Press **Stop** when you have entered all the desired destinations. The display asks you to enter a name.
6. To assign a name to the Group, enter the desired name.
Or
If you don't want to assign a name, skip this procedure.
7. Press **Enter**. If you want to store another group dial number, repeat steps 2 through 7.
Or
To return to Standby mode, press **Stop**.

Storing a Group into a One-Touch Button

You can use a Group number as One-touch dialing. Before you can use this feature, you must first register the Group number (see 'Storing a Number for One-touch Dialing' on page 2.27), and then store the registered Group number into an empty One-touch button.

1. **Press and hold the One-touch button that you want to assign (01 through 20) for 2 seconds.**
2. **Enter the 2-digit Group number, then press Enter.** The group number is stored in the selected one-touch button, and the display asks you to enter one-touch button for another group dial if you wish.
3. If you want to store another One-touch Group Dial numbers, repeat steps 1-3. If you want to return to Standby mode, press **Stop**.

Sending a Fax Using Group Dialing (Multi-Address Transmission)

You can use Group Dialing for Memory Transmission, or Delayed Transmission.

Follow the procedure of the desired operation (Memory Transmission - p. 2.14, Delayed Transmission - p. 2.12). When you come to a step in which the display requests you to enter the remote fax number, press the one-touch button to which you stored the group number. You can use only one group number at one operation. Then continue the procedure to complete the desired operation.

Your machine automatically scans the document loaded in the document tray into memory, and the machine will dial each of the numbers included in the Group.

Searching for a Number in Memory

There are two ways to search for a number in memory. You can either scan from A to Z sequentially, or you can search using the first letter of the name associated with the number.

Searching Sequentially through Memory

1. Press **Search**, then press ▼ to move downward through the memory until you find the number you want. To move upward, press ▲.

Pressing ▼ allows you to search downward through the entire memory in alphabetical order (from A to Z), and ▲ allows you to search upward in reverse alphabetical order (from Z to A).

Each time you press ▼ or ▲, the display shows the next number stored in memory.

While searching through the machine's memory, you'll see that each entry is preceded by one of three letters: 'T' for one-touch dial, 'S' for speed, or 'G' for group dial number. These letters tell you how the number is stored.

2. When the number you want appears in the display, press **Start to dial**.

If a document is loaded, the document begins to be transmitted when the remote fax machine answers the phone.

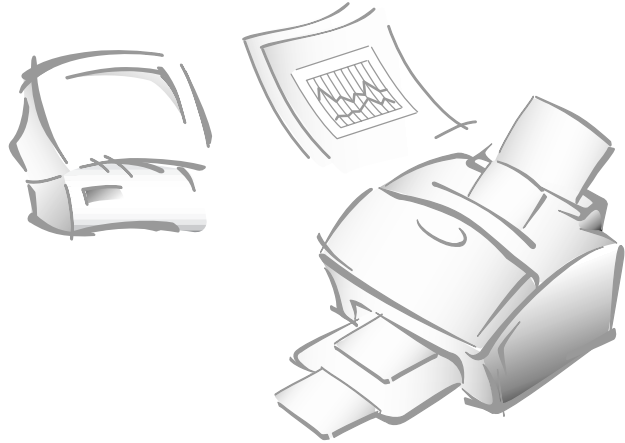
Searching for a Particular First Letter

1. Press **Search**, then press the button labeled with the letter you want to search for. A name beginning with the letter appears in the display.

For example, if you want to find the name 'MOBILE,' press the '6' button, which is labeled with 'MNO.'

2. Press ▼ to display the next name in the list, or ▲ to display the previous name.
3. When the name and number you want appear, press **Start to dial**.

Other Functions



Using Function Buttons

Redial

TO REDIAL THE NUMBER LAST CALLED

Press **Redial**. If a document is loaded in the document tray, the machine automatically begins to send.

TO SEARCH THROUGH REDIAL MEMORY

1. **Press and hold Redial for 2 seconds.** The Redial memory in your machine retains the last 10 numbers called. If you have dialed the same number multiple times, the machine does not count the duplicates.
2. Press **▼** or **▲** to search through memory until you find the number you want.
3. **When the number you want appears in the display, press Start to dial.** If a document is loaded in the document tray, the machine automatically begins to send.

Tone

You may often need to use Touch Tone dial signals to perform special operations by phone. Bank-by-phone and voice mail are two examples of systems that require these signals. If you have pulse service, you can still send Touch Tone signals by following these steps.

1. **Dial the number using pulse dialing.**
2. **When the remote phone answers, press *.** Any numbers you now press will be sent as Touch tones for the remainder of the call.
3. **Dial the remaining numbers required by the service.** The machine returns to the pulse mode after you finish the call.

Flash

Some special phone services require a switch-hook signal for proper operation. For example, if you have call waiting, you can put a call on hold and take a second call on the same line by pressing the switch-hook button. Pressing **Flash** performs the equivalent of a switch-hook operation.

1. **When you are on the telephone and hear the call waiting signal, press Flash once. The first caller is on hold and you are speaking to the second caller.**
2. **Press Flash again to talk to the first caller again.**

*Note: If you do not have a special service that uses the switch-hook signal, don't press **Flash** during a call. If you do, you could disconnect the line.*

Chain Dialling

When using special computer services, such as alternate long distance carriers, credit card calls, or bank-by-phone, you must dial the telephone number of the service and wait for the computer to answer before continuing. The length of time before the computer answers can vary, so using a pre-programmed pause after a service number is not advised.

However, you can store your ID number, for example, in one memory location and the rest of the information, such as your card number, in another memory location.

Dial the phone number of the special service first. Then, when the computer answers, dial the rest of the information, such as a long-distance number. We call this procedure Chain Dialling.

You can combine regular dialing using the dial keypad and/or One-Touch Dialling for a Chain Dialling

***Note:** You can not use 2-digit Speed Dialling, Group Dialling, and /or redial number for Chain Dialling.*

Status

Your machine can perform more than one of the many functions at the same time. For example, you can simultaneously:

- Receive a fax into memory while making a copy.
- Store a fax document for later transmission while printing an incoming fax.
- Print an incoming fax document while scanning a document to the PC.
- Receive a fax into memory while printing a PC document.
- Print a PC document while sending a fax.

When the machine performs dual tasks, Press Speed/Status to toggle the display between the current operation and new operation.

Printing Reports

Your fax machine can print reports containing useful information - Schedule Job, System Data, etc. The following reports are available:

Help List

This list shows the machine's basic functions and commands to use as a quick reference guide.

Message Confirmation Report

This report shows the fax number, the number of pages, elapsed time of the operation, the communication mode, and the communication results.

You can set up your machine to print the message confirmation report (see page 2.38):

- Automatically after each transmission (ON)
- Automatically only if an error occurs during transmission (ERR)
- No report printed at all (OFF). You can print this report manually at any time you want.

Schedule Information List

This list shows the document currently stored for delayed transmission , priority transmission, memory transmission, and TX polling. The list shows the starting time, type of operation, etc.

Telephone Numbers List

This list shows all of the numbers currently stored in the fax machine's memory as One-Touch Dial numbers, Speed Dial numbers, and Group Dial numbers.

System Data List

This list shows the status of the user-selectable options. After you change any setting, print this list to confirm your changes.

Transmission or Reception Journal

This report shows information concerning transmission or reception activities. It can be printed on command, or if the machine is set to do so (see page 2.39). It will automatically print after every 50 transmissions or receptions.

Multi-Communication Report

This report is printed automatically after sending to or receiving from more than one location.

Call Back Message

This report is printed out automatically when you do not respond to a remote operator's Voice Request.

Power Failure Report

This report is printed out automatically when data in memory was erased. This report shows data (if any) erased by the power failure.

Note: The list you have set to print out automatically will not print out in case of no paper, paper jam, or PC print.

TO PRINT LIST

1. Press **Menu**.

2. Press the desired list button on the one-touch keypad.

On the one-touch keypad, press **Journal** for Transmission or Reception Journal, **Help List** for Help List, **TX Confirm** for Message Confirmation Report, **Schedule Job** for Schedule Information List, **Phone Book** for Telephone Numbers List, **System List** for System Data List.

The selected list will be printed out.

User Options

Your fax machine has various user-selectable features. These options are preset at the factory, but you may need to change them. To find out how the options are currently set, print the System Data List. For more information on printing the list, see page 2.36 ~ 2.37.

Setting an Option

1. Press **Menu**, then press **System Data** on the one-touch keypad.
The display shows the first option menu.
2. Scroll through the options by pressing **▼** or **▲** repeatedly.
3. When the option you want appears in the display, enter the number for the desired status. Or, You can use **◀** or **▶** button to select the desired status, then press **Enter** after choosing.

You can exit from setup mode at any time by pressing **Stop**. When you press **Stop**, the machine stores the options you've already changed and returns to Standby mode.

Selectable Options

These instructions assume you've followed the steps above under 'Setting an Option' and the machine is prompting you to change one of the options listed here.

- **PAPER SIZE**—Select the paper size you will use for the recording paper.
Press **1** for letter (**LTR**), **2** for A4 size, or **3** to use legal (**LGL**) size paper.
- **MESSAGE CONF.**—A message confirmation report shows whether the transmission was successful or not, how many pages were sent, etc.
Press **1** to print a confirmation report automatically each time you send a fax (**ON**).
Press **2** to turn this feature off (**OFF**).
Press **3** to print only when an error occurs and the transmission was not successful (**ERR**).

- **AUTO JOURNAL**—A journal shows specific information concerning transmission or reception activities, the time and dates of up to 50 of the most recent transmissions or receptions.

Press **1** to print journal automatically after every 50 transmissions or receptions (ON).

Press **2** to print journal manually (OFF).

- **REMOTE CODE**—The remote receive start code allows you to initiate fax reception from an extension phone plugged into the EXT.LINE jack on the back of your machine. If you pick up the extension phone and hear fax tones, enter the remote code and the machine will start receiving. The password is preset to *9 at factory.

Enter the desired code 0 to 9 on the number keypad.

- **POWER SAVE**—The power saving menu item lets you reduce power usage when the printer is idle.

Press **1** to turn the feature ON. The display asks you to determine the length of time the printer waits after a job is printed before it goes to a reduced power state:

Press **1** for 10 minutes, **2** for 15 minutes, **3** for 30 minutes, **4** for 45 minutes, or **5** for 60 minutes.

If your printer is used constantly, press **2** to turn the feature OFF. It keeps the printer ready to print with the minimum warm-up time.

- **DIAL MODE**—Select the type of dial system your fax machine is connected to.

Press **1** if the fax machine is connected to a tone (Touch Tone) dial line.

Press **2** if the fax machine is connected to a pulse (Rotary) dial line.

- **ECM MODE (Error Correction Mode)**—This mode compensates for poor line quality and ensures accurate, error-free transmission with any other ECM-equipped facsimile machine. If the line quality is poor, transmission time may be increased when ECM is enabled.

Press **1** to turn the Error Correction mode on.

Press **2** to turn the Error Correction mode off.

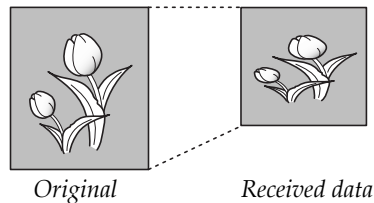
- **RX REDUCTION**—When receiving a document as long as or longer than the paper installed in your machine, the machine can reduce the data in the document to fit into your recording paper size.

Turn on this feature if you want to reduce an incoming page that may otherwise need to be divided into two pages with only a few centimeters on the second page. If the fax machine cannot reduce the data to fit into one page with the feature enabled, the data is divided and printed in actual size on two or more sheets if needed.

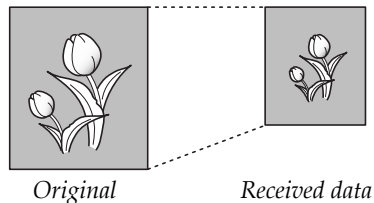
Press **1** to turn this feature on. Note that this feature does not apply to the copy mode.

Press **2** to turn this feature off. The overflow data will be printed out on a second page.

- **H.(Horizontal) REDUCTION**—If you turn the RX reduction feature on, you are allowed to set the horizontal reduction feature on or off. When you set the horizontal reduction to be on, the machine will reduce an incoming page containing overflow data only in vertical as shown below.



If you want to reduce both in vertical and horizontal at the same rate in order to maintain height to width relationships, turn the horizontal reduction feature off. If you turn off this feature, the machine reduces the data as shown below.



Press **1** to turn this feature on.

Press **2** to turn this feature off.

- **DISCARD SIZE**—When receiving or copying a document as long as or longer than the paper installed in your fax machine, you can set the fax machine to discard any excess image at the bottom of the page to fit into the recording paper size.

If the received page is outside the margin you set, it will be printed on two sheets of paper at the actual size.

If the data is within the margin, and the Auto Reduction feature is turned on, it will be reduced to fit into the appropriate size paper (Discard does not take place). If the Auto Reduction feature is turned OFF or fails, the data within the margin will be discarded.

Enter the desired discard size using the number keypad, and press **Enter**.

- **REDIAL INTERVAL**—Your machine can automatically redial a remote fax machine if it was busy or does not answer the first call.

Enter the number of minutes (from 01 to 15) using the number keypad.

- **REDIALS**—Enter the number of attempts (from 0 to 9) to redial the number before giving up.

If you enter 0, the machine will not redial.

- **ANSWER ON RING** —You can select the number of times your machine rings before answering an incoming call. If you are using your machine as both a telephone and a fax machine, we suggest you set the ring count to at least 4 to give you time to answer.

Enter a number from 1 through 7 on the number keypad.

- **DRPD (Distinctive Ring Pattern Detection) MODE**— ‘Distinctive Ring’ is a telephone company service which enables a user to use a single telephone line to answer several different telephone numbers. The particular number someone uses to call you on is identified by different ringing patterns, which consist of various combinations of long and short ringing sounds. This feature is often used by answering services who answer telephones for many different clients and need to know which number someone is calling in on to properly answer the phone.

Using the Distinctive Ring Pattern Detection feature, your fax machine can ‘learn’ the ring pattern you designate to be answered by the FAX machine. Unless you change it, this ringing pattern will continue to be recognized and answered as a FAX call, and all other ringing patterns will be forwarded to the extension telephone or answering machine plugged into the EXT.LINE jack.

You can easily suspend or change Distinctive Ring Pattern Detection at any time.

Before using the Distinctive Ring Pattern Detection option, Distinctive Ring service must be installed on your telephone line by the telephone company. To setup Distinctive Ring Pattern Detection, you will need another telephone line at your location, or someone available to dial your FAX number from outside.

Press **1** to turn this feature on.

Press **2** to turn this feature off.

Press **3** to setup the Distinctive Ring Pattern Detection. The LCD displays ‘WAITING RING’. Call your fax number from another telephone. It is not necessary to place the call from a fax machine. When your machine begins to ring, do not answer the call. The machine requires several rings to learn the pattern.

When the machine completes ‘learning’, the LCD displays ‘END DRPD SETUP’.

With the DRPD feature active, 'DRPD' appears in the display and the previously set reception mode is ignored. If you turn DRPD off, the machine returns to any previously set reception mode.

Notes:

- *DRPD must be set up again if you re-assign your fax number, or connect the machine to another telephone line.*
- *After DRPD has been set up, call your fax number again to verify that the machine answers with a fax tone, then have a call placed to a different number assigned to that same line to be sure the call is forwarded to the extension telephone or answering machine plugged into the EXT.LINE jack.*
- **SEND FROM MEMORY**—If you are annoyed that you have to wait until documents in the feeder are sent out when you try to send or reserve another fax, turn this feature on. This feature enables all transmission documents are automatically scanned into memory before transmission.

Press **1** to turn this feature on.

Press **2** to turn this feature off.

- **LOCAL ID**—This feature allows the machine to automatically print the page number, and the date and time of the reception at the bottom of each page of a received document.

Press **1** to turn this feature on.

Press **2** to turn this feature off.

- **PRIORITY TERM**—When you want to print a PC document while the machine prints a received fax on the recording paper, you can interrupt the printing and print the PC document. Press the **Print Priority** button to enable the feature. The interrupted fax data will be stored in memory. To disable, press the **Print Priority** button again.

You can set your machine to turn the feature off automatically if there is no further data printed within 30 minutes or 8 hours after PC printing.

Press **1** to select 8 hours. The machine turns the feature off automatically 8 hours after PC printing is completed.

Press **2** to select 30 minutes. The machine turns the feature off automatically 30 minutes after PC Printing is completed.

- **CLOCK MODE**—This feature is to select the time format.

Press **1** to select 12 hour format.

Press **2** to select 24 hour format.

Maintenance

If you are getting streaks or spots on your print, you may run the maintenance.

Cleaning Drum

This procedure removes excess toner on the OPC drum.

1. Make sure that paper is loaded in the automatic feeder.
2. Press **Menu**, and **Maintenance** on the one-touch keypad.



CLEAN DRUM ?

3. Press **Enter**. The machine automatically pulls in a sheet of paper, and prints out. The toner particles on the OPC drum surface is fixed to the paper.

Adjust Shading

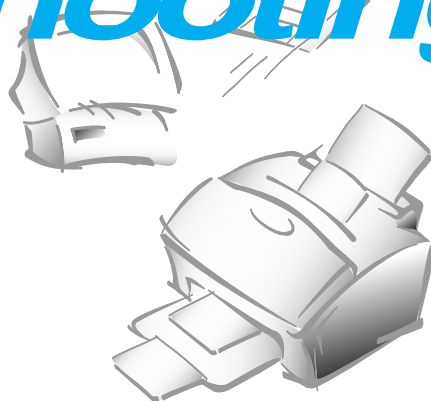
This procedure makes a new shading reference value.

1. Make sure that white paper is loaded in the automatic feeder. It is recommended to load a letter-sized paper (216 × 279 mm).
2. Press **Menu**, and **Maintenance** on the one-touch keypad.
3. Press **▲** or **▼** to select `ADJUST SHADING?' option.
4. Press **Enter**.
5. Press **1** to confirm your selection.



Troubleshooting

Troubleshooting

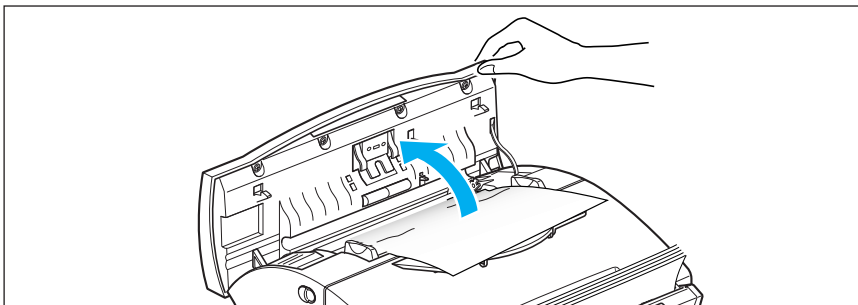


Clearing Jams

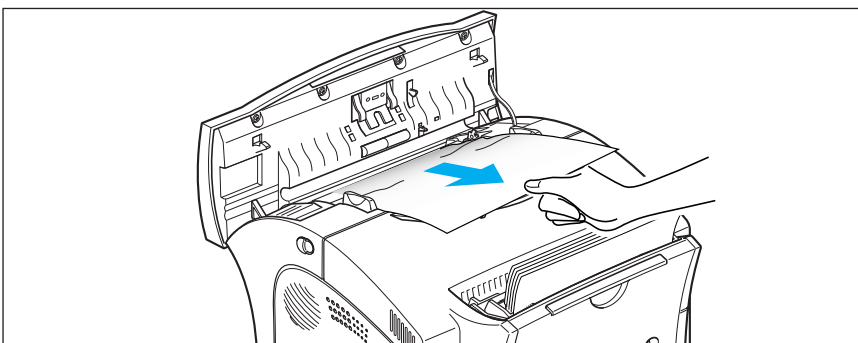
Document Jams While Sending a Fax

If a document jams while you are sending it, 'DOCUMENT JAM' appears in the display. Do not pull the document out of the slot. If you do this, it could harm your machine.

1. Open the control panel with hand.



2. Carefully remove the jammed document. Then close the control panel firmly until it clicks into place.

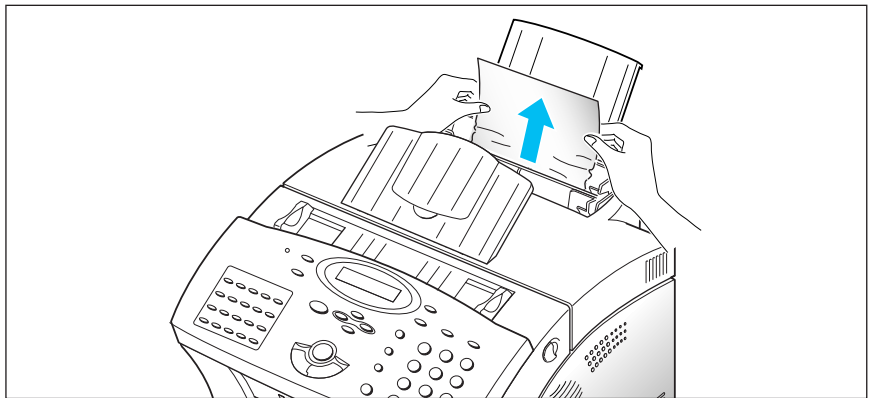


Paper Jams While the Machine is Printing

By carefully selecting paper type and loading them properly, you should be able to avoid most paper jams. If paper jams occur, an error message appears in the display. Follow the steps below to clear jam. To avoid tearing paper, pull the jammed paper out gently and slowly.

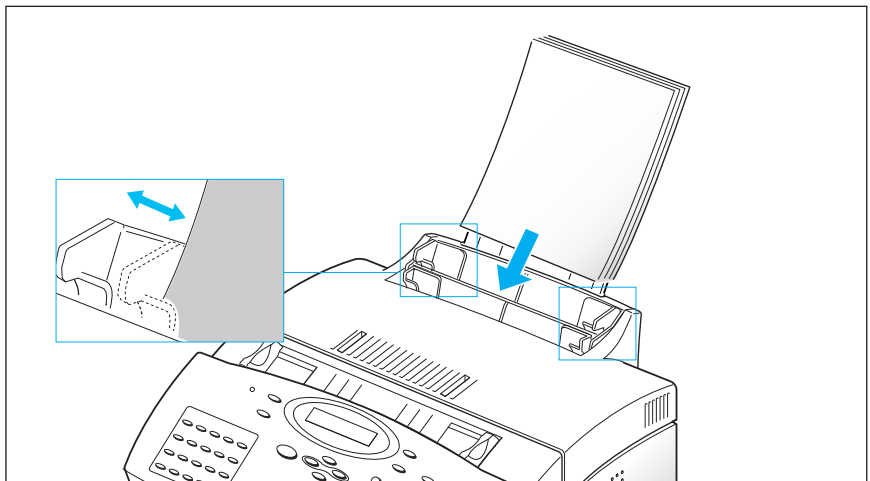
IF JAMMED IN THE PAPER FEED AREA

1. Remove the jammed paper as shown below.



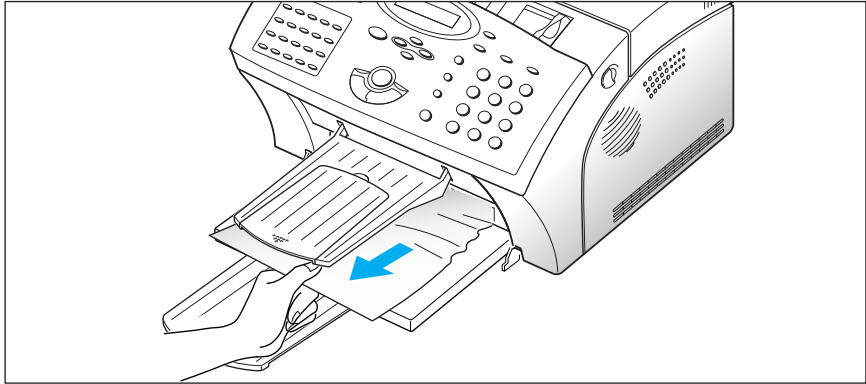
2. After you have removed the jammed paper, load the paper with the print side facing you.

Adjust the paper guide to match the width of the paper.



IF JAMMED IN THE PRINTER OUTPUT AREA

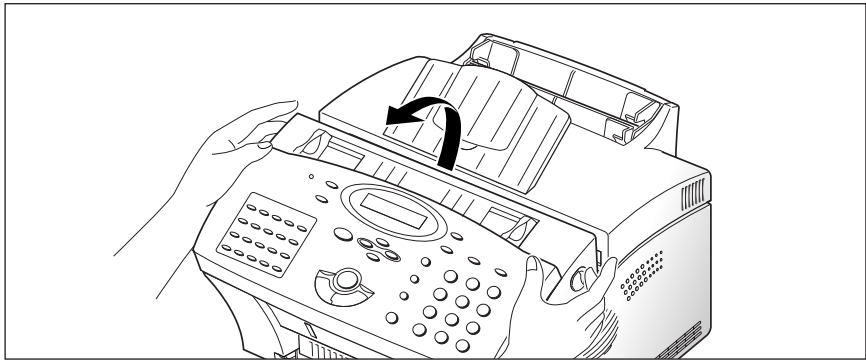
1. If the paper jams as it exits to the printer exit tray and a long portion of the paper is visible, pull the paper straight out.



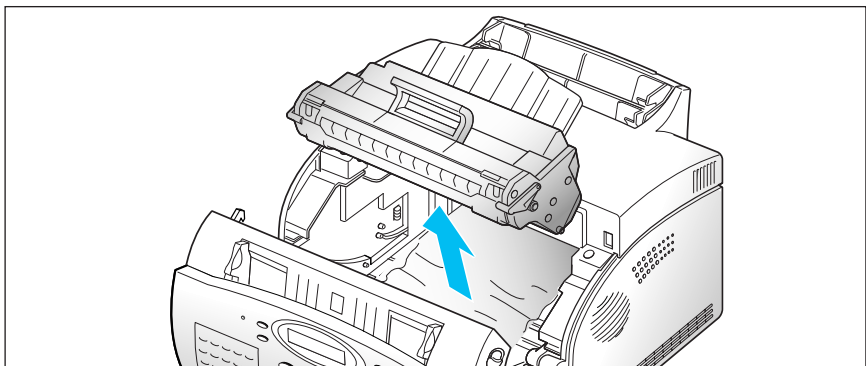
If there is resistance to the paper, and it does not move immediately when you pull, stop pulling. Continue with the next step.

IF JAMMED INSIDE THE MACHINE

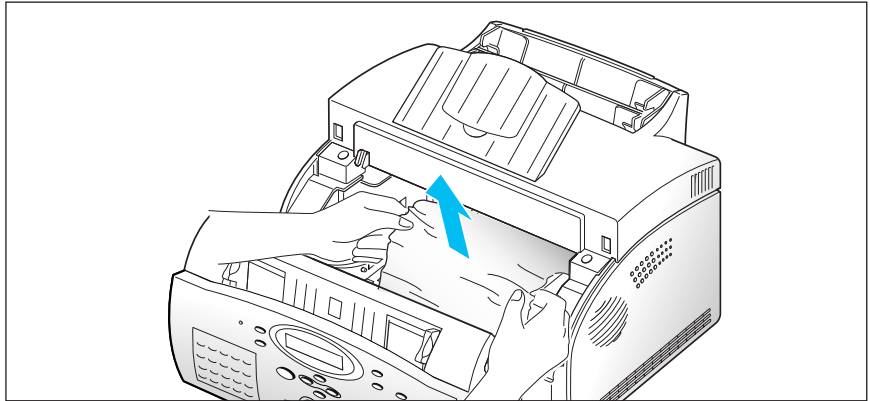
1. Pulling the cover release button toward you, open the cover.



2. Remove the image cartridge.



3. Gently pull the paper toward you.



4. Check that there is no other paper in the machine.

5. Reinstall the image cartridge, then close the cover.

Tips for Avoiding Paper Jams

By carefully selecting print materials and loading them properly, you should be able to avoid most paper jams. If jams do occur, follow the steps outlined in “Clearing Jams” starting on page 3.2. If jams occur frequently, make sure that you are following these tips to avoid jams.

- Follow the procedures in “Loading Paper” on page 1.11 to load paper properly. Make sure that the adjustable guides are positioned correctly.
- Do not overload the paper. Make sure that the paper can be loaded up to 150 sheets at a time.
- Flex, fan, and straighten the paper before loading it.
- Do not load wrinkled, creased, damp, or highly curled paper.
- Do not mix paper types.
- Use only recommended print materials.
- Make sure that the recommended print side is facing up when loading in the feeder.
- Keep print materials stored in an acceptable environment.

LCD Error Messages

Display	Meaning	Solution
RETRY REDIAL?	The machine is waiting for the programmed interval to automatically redial a previously busy station.	You can press Start to immediately redial, or Stop to cancel the redial operation.
COMM. ERROR	A problem with facsimile communications has occurred.	Try again.
INCOMPATIBLE	Remote party did not have the requested feature, such as polling. This also occurs if the remote machine has insufficient memory to complete the operation you are attempting.	Reconfirm your remote party's feature.
DOCUMENT JAM	The loaded document has jammed in the feeder.	Clear the document jam.
DOOR OPEN OR NO TONER	The cover is not securely latched, or the image cartridge is not installed.	Press down on the cover until it clicks in place, or install the cartridge.
GROUP NOT AVAILABLE	You have tried to select a group location where only a single location number can be used.	
LINE ERROR	Your unit cannot connect with the remote machine, or has lost contact because of a problem on the phone line.	Try again. If failure persists, wait an hour or so for the line to clear, then try again. Or, turn the ECM mode on. See 'User Options.'
LOAD DOCUMENT	You have attempted to set up a sending operation with no document loaded.	Load a document and try again.
MEMORY FULL	The memory has become full.	Either delete unnecessary documents, or retransmit after more memory becomes available, or split the transmission into more than one operation.
NO ANSWER	The remote machine has not answered after all the redial attempts.	Try again. Make sure the remote machine is operational.

Display	Meaning	Solution
NO. NOT ASSIGNED	The One-Touch or Speed Dial location you tried to use has no number assigned to it.	Dial the number manually with the keypad, or assign the number.
NO PAPER	The recording paper has run out.	Load the recording paper.
OVERHEAT	The printer part in your unit has overheated.	Please wait until it cools down. If you cannot solve the problem, please call service.
PAPER JAM 0 OPEN/CLOSE DOOR	Recording paper has jammed in paper feeding area.	Clear the jam.
PAPER JAM 1 OPEN/CLOSE DOOR	Recording paper has jammed inside the unit.	Clear the jam.
PAPER JAM 2 CHECK INSIDE	The jammed paper still remains inside the unit.	Clear the jam.
POLLING ERROR	The remote fax machine you want to poll is not ready to respond to your poll. Or When setting up to poll another fax machine, you have used an incorrect poll code.	The remote operator should know in advance that you are polling and have their fax unit loaded with the original document. Enter the correct poll code.
WARMING UP PLEASE WAIT	The machine is warming up and is off-line.	Wait until the machine is on-line.
TONER LOW	The toner is almost empty.	Take out the toner cartridge machine and gently shake it. After printing a few pages, 'TONER EMPTY, REPLACE [CARTRIDGE]' appears in the display, and the printer system stops. Replace with new one.
TONER EMPTY, RE- PLACE [CARTRIDGE]	The toner cartridge has run out . The machine stops.	Replace with a new toner cartridge, and cleaning felt simultaneously.
FUSER ERROR	There is a problem in the Fuser unit	Unplug the power cord and plug it in again. If you cannot solve the problem, please call service.
ENGINE ERROR	There is a problem in the LSU (Laser Scanning Unit)	Unplug the power cord and plug it in again. If you cannot solve the problem, please call service.

Fixing Problems

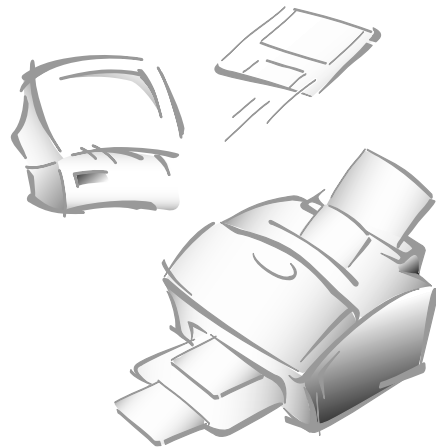
Your problem may be listed on page 3.6 in the 'LCD Error Messages' section. Below are other problems you can solve by yourself. If not, call for service.

Fax Problems

Symptom	Cause and Solution
The machine is not working, there is no display and the buttons are not working.	<ul style="list-style-type: none">• Unplug the power cord and plug it in again.• Check your socket is live.
No dial tone.	<ul style="list-style-type: none">• Check the phone line is connected properly.• Check the phone socket in the wall by plugging in another phone.
The numbers stored in the memory do not dial correctly.	<ul style="list-style-type: none">• Make sure that the numbers are stored in memory correctly.• Print a Telephone Numbers List. See page 2.39.
The document does not feed into the machine.	<ul style="list-style-type: none">• Make sure that the document is not wrinkled and you are putting it in correctly. Check the document is the right size, not too thick or thin.• Make sure that the cover is firmly closed.
You cannot receive faxes automatically.	<ul style="list-style-type: none">• The FAX or TEL / FAX mode should be selected.• Is there paper in the machine?• Check if the display shows 'MEMORY FULL.'
The machine cannot receive faxes manually.	<ul style="list-style-type: none">• Did you hang up the handset before you pressed Start? <p><i>Note: It will be applied when you have Work Centre with handset or you have a phone connected to the EXT.LINE jack on the bottom of the machine.</i></p>
The machine will not send anything.	<ul style="list-style-type: none">• Make sure that the document is loaded face down.• 'TX' should show up in the display.• Check the other machine you are sending to, to see if it can receive your fax.

Symptom	Cause and Solution
You cannot poll another machine.	<ul style="list-style-type: none"> • The fax machine you are polling may be using a poll code.
The fax you receive has got blank spaces or you received poor-quality copy.	<ul style="list-style-type: none"> • The machine sending you the fax may be faulty. • The fax machine sending you a fax may have a dirty scan glass. • A noisy phone line can cause line errors. • Check your machine by making a copy. • The cartridge toner may be empty.
Poor-quality Copy	<ul style="list-style-type: none"> • You may run the Adjust Shading in Maintenance.
Are some of the words on the fax you receive stretched?	<ul style="list-style-type: none"> • The machine sending you the fax had a temporary document jam.
<p>There are lines on copies or documents you send.</p> <p>The machine dials a number, but fails to make a connection with another fax machine.</p>	<ul style="list-style-type: none"> • Check your scan glass for marks, and clean it. See page 3.11. • The other fax machine may be turned off, out of paper, or cannot answer incoming calls. Speak with the other machine operator and ask them to sort out the problem.
You cannot store a document in memory.	<ul style="list-style-type: none"> • There may not be enough memory to store the document. If the display shows a 'MEMORY FULL' message, delete any documents you no longer need from the memory, then restore the document.
Blank areas appear at the bottom of each page or on other pages, with only a small strip of text printed at the top.	<ul style="list-style-type: none"> • You may have chosen the wrong paper settings in the user options set up. See page 2.38 to choose the proper paper size.

Maintenance



Clearing Memory

You can selectively clear information stored in your machine's memory.

1. Press **Menu, then press **Memory Clear** on the one-touch keypad.**

The display shows the options you can choose to clear.

1. SYSTEM ID : your System ID number and name are cleared from the machine's memory.
2. SYSTEM DATA : restores user-selectable options to the default value.
3. PHONEBK&MEMORY : clears the one-touch, speed dial, or group dial numbers stored in memory. In addition, all the Schedule Job operations you have reserved are also canceled.
4. TX-RX JOURNAL : clears all records of transmissions & receptions.

3. Move to the options by pressing **▲ or **▼** repeatedly until the one you want to clear is **blinking**.**

4. Press **Enter.** The display asks you to confirm your selection.

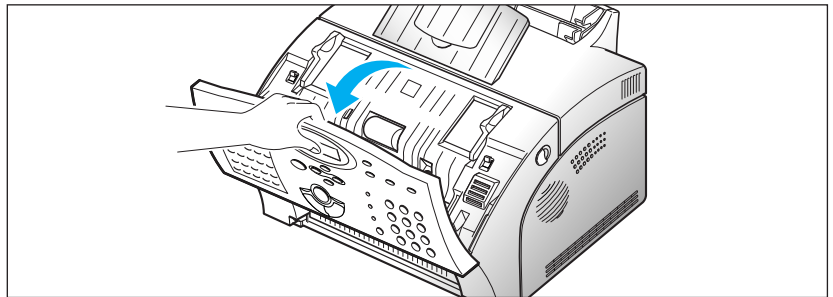
5. Press **1 to confirm.** Or use **◀** or **▶** to choose 'YES', then press **Enter**. The selected memory is cleared.

Cleaning the Document Scanner

To keep your machine working properly, occasionally clean the white roller, ADF rubber, and the scanning glass. If they are dirty, documents sent to another fax machine will not be clear.

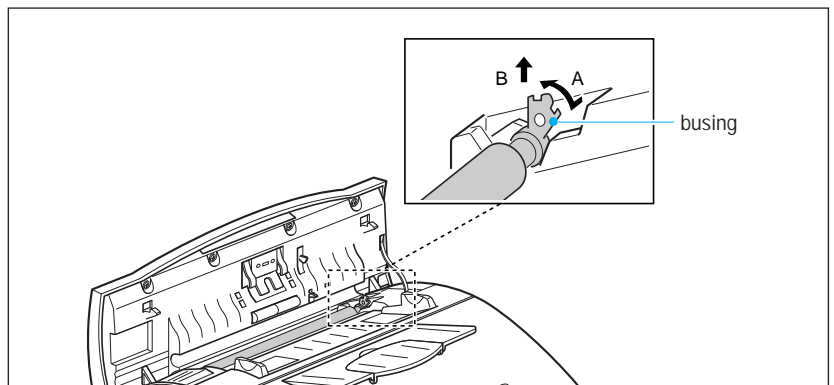
Note: Do not turn the power off to clean the scanner, as documents stored in memory will be lost.

1. Open the control panel with hand.

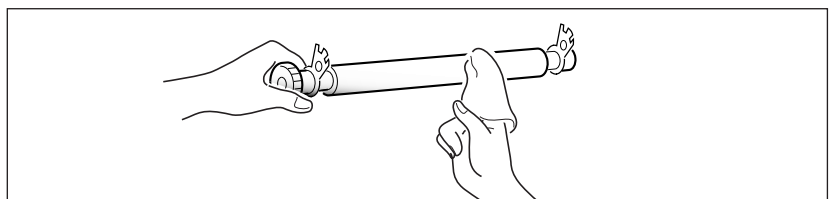


2. Disassemble the white roller as follows:

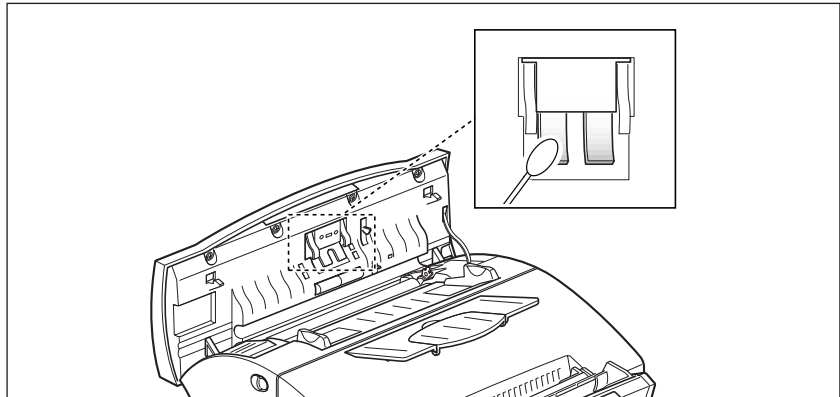
Both ends of the white roller have plastic bushings that are snapped shut with small tabs on them. Pull the bushing slightly inward (A), then rotate the bushing (B) until it reaches a slot. Then pull the roller upward.



3. Wipe the roller surface with a soft cloth dampened with water.

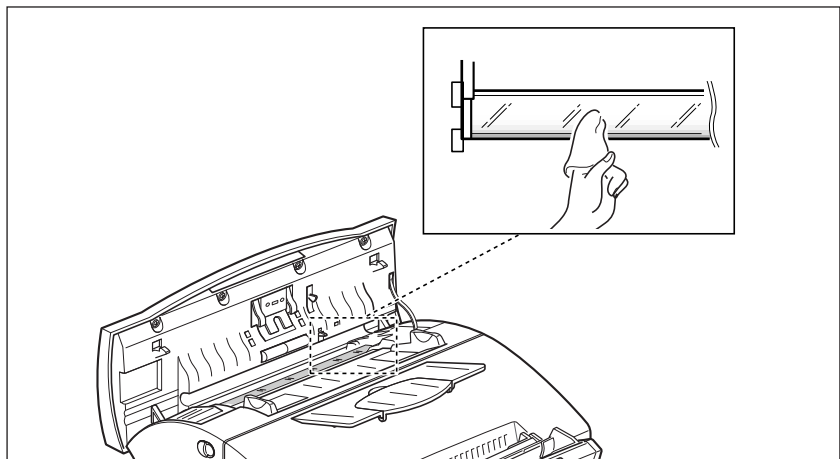


4. Clean the ADF rubber piece also.

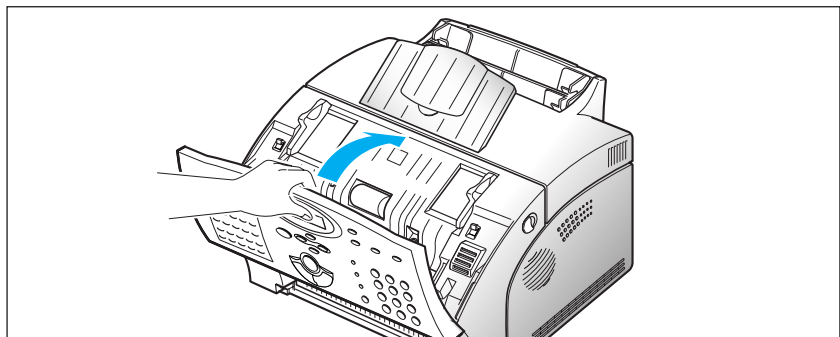


5. Carefully wipe the scanning glass with a soft, dry cloth.

If the glass is very dirty, first wipe it with a slightly dampened cloth, then with a dry cloth. Be very careful not to scratch the glass surface.



6. Replace the roller in reverse order, and then close the control panel firmly until it clicks into place.



Managing Image Cartridge

Expected Cartridge Life

The life of your image cartridge depends on the amount of toner used in each print job. For instance, when you print a typical business letter with about 5% page coverage, you can expect a print cartridge life of approximately 5,000 pages. The actual number may vary according to the print density of the page you print. If you print a lot of graphics, you may need to change the cartridge more often.

You can extend the life of your print cartridge by using Econo Mode setting. Econo Mode uses approximately 50% less toner than normal printing. The printed image is much lighter, and is adequate for printing drafts or proofs.

Replacing Image Cartridge

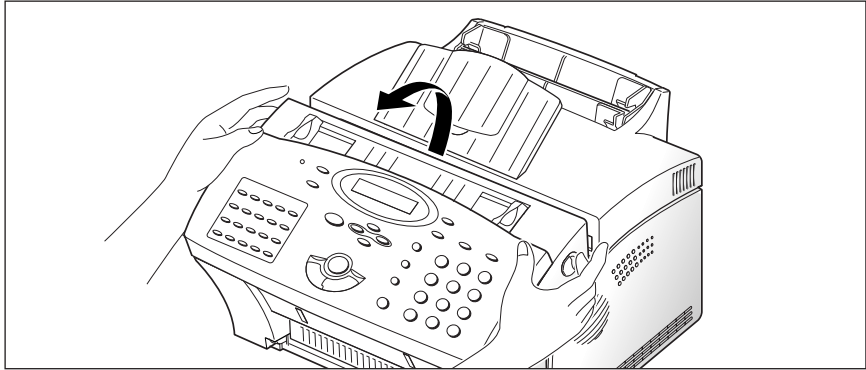
When the image cartridge is near the end of its life, white streaks or hue changes will occur. You can temporarily re-establish print quality by redistributing the remaining toner in the cartridge.

- 1. Open the cover and remove the image cartridge.**
- 2. Gently shake the cartridge to distribute the toner evenly inside the cartridge.**
- 3. Reinstall the cartridge and close the cover.**

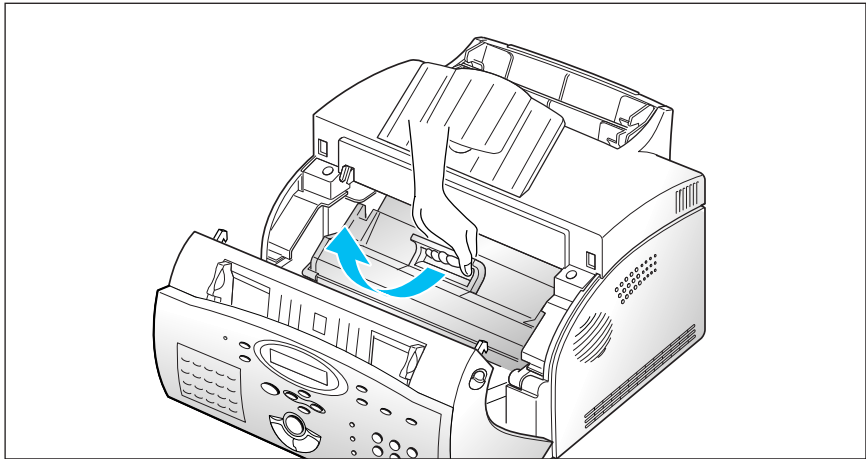
This is typically successful one time only. When the toner will eventually run out, white pages will be printed when a print job is sent, or when a fax is received. The print cartridge needs to be replaced. See the following page.

To replace the image cartridge:

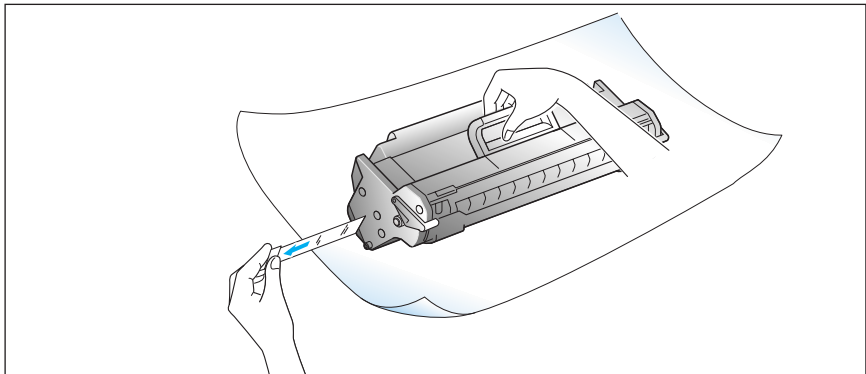
- 1. Pulling the cover release button toward you, open the machine cover.**



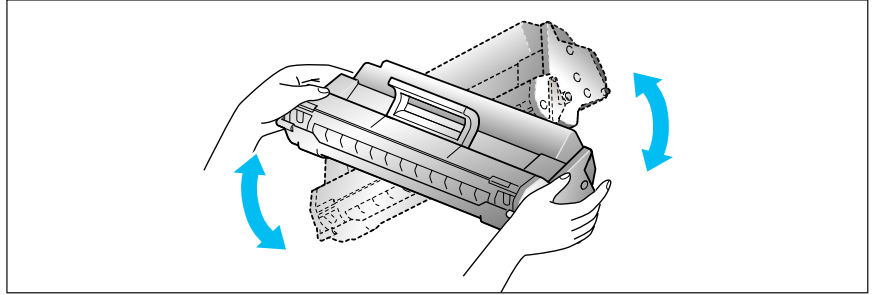
- 2. Remove the old image cartridge.** Follow the instructions printed on the cartridge box to recycle the used cartridge.



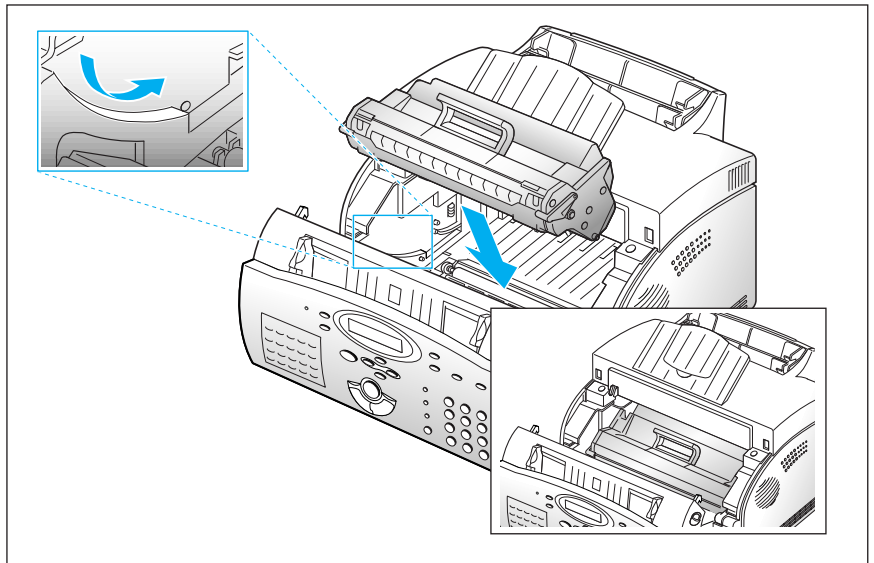
- 3. Unpack a new image cartridge, and carefully remove the sealing tape.**



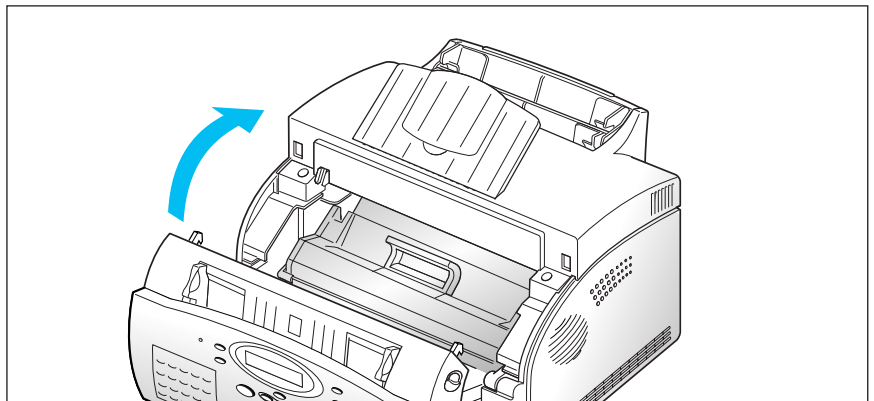
4. Shake the cartridge from side to side 5 or 6 times to distribute the toner evenly inside the cartridge.



5. Find the cartridge slots inside the machine, one on each side. Grasp the handle and slide the cartridge down between the cartridge slots until it drops into place.



6. Close the cover firmly.



Memo

Appendix

Appendix

FCC Regulations

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Do not make any changes or modifications to the equipment unless specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

Use of shielded cable is required to comply with Class B limits in Subpart B of Part 15 of FCC Rules.

Canadian Radio Interference Regulations

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled “Digital Apparatus”, ICES-003 of the Industry and Science Canada.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: “Appareils Numériques”, NMB-003 édictée par l’Industrie et Sciences Canada.

Laser Safety Statement

The printer is certified in the U.S. to conform to the requirements of DHHS 21 CFR Subchapter J for Class I(1) laser products, and elsewhere is certified as a Class I laser product conforming to the requirements of IEC 825.

Class I laser products are not considered to be hazardous. The laser system and printer are designed so there is never any human access to laser radiation above a Class I level during normal operation, user maintenance, or prescribed service condition.

WARNING Never operate or service the printer with the protective cover removed from the Laser/Scanner assembly. The reflected beam, although invisible, can damage your eyes.



CAUTION	-INVISIBLE LASER RADIATION WHEN THIS COVER IS OPEN. DO NOT OPEN THIS COVER
VORSICHT	-UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSETZEN.
ATTENTION	-RAYONNEMENT LASER INVISIBLE EN CAS D'OVERTURE. DANGEREUSE AU FAISCEAU.
ATTENZIONE	-RADIAZIONE LASER INVISIBILE IN CASO DI APERTURA. EVITARE L'ESPOSIZIONE AL FASCIO.
PRECAUCION	-RADIACION LASER IVISIBLE CUANDO SE ABRE. EVITAR EXPONERSE AL RAYO.
ADVARSEL	-USYNLIG LASERSTRÅLNING VED ÅBNING NÅR SIKKERHEDSBRYDERE ER UDE AF FUNKTION UNDGÅ UDSAETTEELSE FOR STRÅLNING.
ADVARSER	-USYNLIG LASERSTRÅLNING NÅR DEKSEL ÅPNES. STIRR IKKE INN I STRÅLEN. UNNGÅ EKSPONERING FOR STRÅLEN.
VARNING	-OSYNLIG LASERSTRÅLNING NÅR DENNA DEL ÄR ÖPPAND OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN STRÅLEN ÄR FARLIG.
VARO	-AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE ÄLÄ KATSO SÄTEESEEN.

Laser product labels are located above the print cartridge.

CLASS 1 LASER PRODUCT
LASER KLASSE 1
LUOKAN 1 LASERLAITE
APPAREIL À LASER DE CLASSE 1
TO IEC 825

Safety Information

PRODUCT SAFETY

USA	UL 1950 (UL LISTING)
CANADA	CSA C22.2 No. 950 & UL 1950 (CSA Certification)
EEC (Europe)	IEC 60950/EN 60950 (TÜV GS Certification)
CB	IEC 60950

LASER SAFETY

EEC (Europe)	HD 194. & EN 60825
USA	21 CFR, Chapter 1, Subchapter J (CDRH Certified)

Power Saver

This printer contains advanced energy conservation technology that reduces power consumption when it is not in active use.

When the printer does not receive data for an extended period of time, power consumption is automatically lowered. For potentially faster printing of the first page, you may turn the power save off from the Remote Control Panel setting.



The energy star emblem does not represent EPA endorsement of any product or service.

Specifications

Applicable line	Public Switched Telephone Network (PSTN) or behind PABX
Compatibility	CCITT Group 3
Data coding	MH/MR/MMR
Modem speed	14400/12000/9600/7200/4800/2400 bps
Transmission speed	Approx. 6 sec. (V.17 ECM: 14.4 kbps)
Effective scanning width	8.3 inches (210 mm)
Effective printing width	8.2 inches (202 mm)
Scanning method	Sheet-fed Contact Image Sensor (CIS)
Memory	2 MByte
Halftone	256 levels
Printing speed	8 PPM
Automatic document feeder	30 pages (based on 20 lb or 75 g/m ²)
LCD	16 characters X 2 lines
Dimension (H X W X D)	238 X 355 X 415 mm
Weight	9 Kg
Power requirements	120 VAC, 60 Hz
Power consumption	(Standby) 13 W
Environmental conditions	Temperature : 50°F to 86°F (10°C to 30°C) Humidity : 30% to 80% RH
Auto dialer	One-touch dialing (registration for 20 numbers) Speed dialing - Registration for 80 numbers
Document size – Width	5.8 to 8.5 inches (148 to 216 mm)
– Length	Single page : 5 to 59 inches (128 to 1,500 mm) Multi pages : 8.3 to 11.7 inches (279 to 297 mm)
– Weight (thickness)	Single page : 50 to 100g/m ² (0.07 to 0.20 mm) 20 pages : 50 to 90g/m ² (0.07 to 0.13 mm), Uncoated paper 30 pages : 75g/m ² (0.1 mm), Uncoated paper
Recording paper size	Letter : 8.5 X 11 inches (216 X 279 mm)
– for automatic feeder	A4 : 8.3 X 11.6 inches (210 X 297 mm) Legal : 8.5 X 14 inches (216 X 356 mm) weight : 60 to 90 g/m ² thickness : 0.08 to 0.12 mm
– for manual feeder	min. : 4 X 5.9 inches (100 X 149 mm) (weight : 60 to 130 g/m ²)
Recording paper capacity	Paper : 150 sheets (based on 75g/m ² paper) Other media : Up to 5 sheets (OHP, envelopes, labels)
Printing method	Laser Scanning Unit
Scanning density – Horizontal	300 dpi
– Vertical	Standard : 3.85 lines/mm (98 Lpi) Fine : 7.7 lines/mm (196 Lpi) Super fine : 11.8 lines/mm (300 Lpi) Super fine : 15.4 lines/mm (392 Lpi)
Image cartridge life	5,000 @ 5 % coverage(A4)